Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

Final

AIR QUALITY PERMIT

Issued under 401 KAR 52:020

Permittee Name:	**Dart Polymer, Inc.**
Mailing Address:	**2400 Harbor Road, Owensboro, Kentucky 42301**
Source Name:	**Dart Polymers, Inc.**
Mailing Address:	**2400 Harbor Road Owensboro, Kentucky 42301**
Source Location:	**Same as above**
Permit ID:	**V-06-046**
Agency Interest #:	**895**
Activity ID:	**APE20050002**
Review Type:	**Title V / Synthetic Minor, Construction / Operating**
Source ID:	**21-059-00131**
Regional Office:	**Owensboro Regional Office 3032 Alvey Park Dr. W., Suite 700 Owensboro, KY 42303 (270) 687-7304**
County:	**Daviess**
Application Complete Date:	**March 15, 2007**
Issuance Date:	**November 27, 2007**
Revision Date:	**N/A**
Expiration Date:	**November 27, 2012**

John S. Lyons, Director
Division for Air Quality

Revised 09/29/06

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	Permit type	**Log or Activity#**	**Complete Date**	**Issuance Date**	**Summary of Action**
V-00-003	**Initial Issuance**	**50667/51350**	**03/27/00**	**06/04/01**	**Initial Title V Operating Permit**
V-06-046	**Renewal**	**895**	**02/05/07**	**11/27/07**	**Title V Permit Renewal**

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EMISSION GROUP 01: BATCH PROCESS VENTS, PLANT 1 (MASS PLANT)

Primary Product: Polystyrene Pellets
Control Equipment: None
Description: Group 2 batch process vents per 40 CFR 63, Subpart JJJ

Emission Point M11 (Line 2 Vent)

Maximum Capacity: 2,500 lbs/hr (annualized hourly rate based on maximum number of batches per year and pounds material per batch)

Description: EP M11 exhausts the following equipment:

1. Pre-batch Reactor (R-2110), installed in 1976
2. Pre-poly Reactor (R-2210), installed in 1976
3. U-tube Reactor (R-2310), installed in 1976

Emission Point M06 (Anti-oxidant Tank Vent)

Maximum Capacity: 8.852 tons/hr (Rubber Dissolvers) and 0.1289 tons/hr (Anti-oxidant Tank) (annualized hourly rate based on maximum number of batches per year and pounds material per batch)

Description: EP M06 exhausts the following equipment:

4. 6,000 gallon Rubber Dissolver Process Tank# 1 (D-0410), installed in 1984
5. 6,000 gallon Rubber Dissolver Process Tank# 2 (D-0420), installed in 1984
6. 6,000 gallon Rubber Dissolver Process Tank# 3 (D-0430), installed in 1994
7. Anti-oxidant Tank (TK-0710), installed in 1994

Emission Point M08A (Take Off Lines Vent)

Description: 8. Die Heads Line 2

Emission Point M06A (Rubber Dissolvers)

Maximum Capacity: 8.10 tons/hr (annualized hourly rate based on maximum number of batches per year and pounds material per batch)

Description: EP M06A exhausts the following equipment:

9. 20,000 gallon Rubber Dissolver Process Tank# 1 (D-0425), to be installed in 2007
10. 20,000 gallon Rubber Dissolver Process Tank# 2 (D-0435), to be installed in 2007

EMISSION GROUP 02 – BATCH PROCESS VENTS, PLANT 3 (SUSPENSION PLANT)

Primary Product: Polystyrene Beads
Control Equipment: None
Description: Group 2 batch process vents per 40 CFR 63 (NESHAP, Subpart JJJ)

Emission Point: S06 (Roof Vent)

Maximum Capacity: 7.0 tons/hr (annualized hourly rate based on maximum number of batches per year and pounds material per batch)

Description: EP S06 exhausts the following equipment:

1. Two (2) 20,000 gallon batch reactors (R-4110 & R-4210), installed in 1989
2. One (1) 50,000 gallon batchout tank (D-4510), installed in 1989

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Point: S07 (Roof Vent)

Maximum Capacity: 7.0 tons/hr (annualized hourly rate based on maximum number of batches per year and pounds material per batch)

Description: EP S07 exhausts the following equipment:

1. Two (2) 20,000 gallon batch reactors (R-4310 & R-4410), installed in 1989
2. One (1) 50,000 gallon batchout tank (D-4610), installed in 1989

Emission Point: S08 (Roof Vent)

Maximum Capacity: 3.71 tons/hr (annualized hourly rate based on maximum number of batches per year and pounds material per batch)

Description: EP S08 exhausts the following equipment:

1. One (1) 20,000 gallon batch reactor (R-4610), to be installed in 2007
2. One (1) 50,000 gallon batchout tank (D-4910), to be installed in 2007

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 3(xx) incorporates by reference *40 CFR Part 63.1310 to 63.1336 (Subpart JJJ), "National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins"* – applies to EP M11, M06, M06A, S06, S07, and S08 except EP M08A (Take Off Lines Vent) since it is exempt from the requirements of Subpart JJJ pursuant to 40 CFR 63.1310(d)(4) for finishing processes. EP M06A is designated as "new" affected source pursuant to 40 CFR 63.1310(a)(3) since it is a replacement of existing equipment. EP S08 is designated as a change or addition to an existing affected source and shall meet the requirements of an "existing" affected source, as explained in 40 CFR 63.1320(i)(2)(iii).

1. Operating Limitations:

a. The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3 (a), apply to the batch process vents at Plants 1 and 3 (EP M11, M06, M06A, S06, S07, and S08), as Group 2 batch process vents, except when otherwise specified in 40 CFR 63, Subpart JJJ. Table 1 to Subpart JJJ of Part 63 specifies the provisions of Subpart A that apply and those that do not apply. [40 CFR Part 63.1311(f)]

b. Pursuant to 40 CFR 63.1310(i)(2)(i), the EP M06A shall comply with the requirements for a new affected source upon initial start-up as provided in 40 CFR 63.6(b).

c. Pursuant to 40 CFR 63.1310(i)(2)(iii), the EP S08 shall comply with the requirements for an existing affected source within 120 days after the date of initial start-up or by the appropriate compliance date specified in 40 CFR 63.1311.

d. Pursuant to 40 CFR 63.1322(f), the permittee of a Group 2 batch process vent with annual emissions greater than or equal to the level specified in 40 CFR 63.1323(d) (11,800 kg/yr or 26,007 lb/yr) shall comply with the provisions of 40 CFR 63.1322(f)(1), (f)(2), or (h) as follows:

i) Pursuant to 40 CFR 63.1322(f)(1), the permittee of an affected source shall comply with the requirements in 40 CFR 63.1322(f)(1)(i) through (f)(1)(iv):

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

A) The permittee shall establish a batch mass input limitation that ensures the Group 2 batch process vent does not become a Group 1 batch process vent. [40 CFR 63.1322(f)(1)(i)]
B) Over the course of the affected source's "year", as reported in the Notification of Compliance Status in accordance with 40 CFR 63.1335(e)(5)(iv), the permittee shall not charge a mass of HAP or material to the batch unit operation that is greater than the level established as the batch mass input limitation. [40 CFR 63.1322(f)(1)(ii)]
C) The owner or operator shall comply with the recordkeeping requirements in 40 CFR 63.1326(d)(2), and the reporting requirements in 40 CFR 63.1327(a)(3), (b), and (c). [40 CFR 63.1322(f)(1)(iii)]
D) The owner or operator shall comply with 40 CFR 63.1323(i) when process changes are made. [40 CFR 63.1322(f)(1)(iv)]

ii) Comply with the requirements of 40 CFR 63, Subpart JJJ for Group 1 batch process vents. [40 CFR 63.1322(f)(2)]

iii) Pursuant to 40 CFR 63.1322(h), the permittee of Group 2 batch process vents are not required to establish a batch mass input limitation if the batch process vent is Group 2 at the conditions specified in 40 CFR 63.1322(h)(1) and (h)(2) and if the permittee complies with the recordkeeping provisions in 40 CFR 63.1326(a)(1) through (3), 63.1326(a)(9), and 63.1326(a)(4) through (6) as applicable, and the reporting requirements in 40 CFR 63.1327(a)(5), (a)(6), and (b).
A) Emissions for the single highest-HAP recipe (considering all products that are produced in the batch unit operation) are used in the group determination; and [40 CFR 63.1322(h)(1)]
B) The group determination assumes that the batch unit operation is operating at the maximum design capacity of the TPPU for 12 months. [40 CFR 63.1322(h)(2)]

e. Pursuant to 40 CFR 63.1322(g), the permittee of a Group 2 batch process vent with annual emissions less than the level specified in 40 CFR 63.1323(d) (11,800 kg/yr or 26,007 lb/yr) shall comply with the provisions of 40 CFR 63.1322(g)(1), (g)(2), (g)(3), or (g)(4) as follows:
i) Pursuant to 40 CFR 63.1322(g), the permittee of the affected source shall comply with the following requirements:
A) The permittee of the affected source shall comply with the requirements in paragraphs 40 CFR 63.1322(g)(1)(i) through (g)(1)(iv). [40 CFR 63.1322(g)(1)]
1) The permittee shall establish a batch mass input limitation that ensures emissions do not exceed the level specified in 40 CFR 63.1323(d). [40 CFR 63.1322(g)(1)(i)]
2) Over the course of the affected source's "year", as reported in the Notification of Compliance Status in accordance with 40 CFR 63.1335(e)(5)(iv), the permittee shall not charge a mass of HAP or material to the batch unit operation that is greater than the level established as the batch mass input limitation. [40 CFR 63.1322(g)(1)(ii)]

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3) The permittee shall comply with the recordkeeping requirements in 40 CFR 63.1326(d)(1), and the reporting requirements in 40 CFR 63.1327(a)(2), (b), and (c). [40 CFR 63.1322(g)(1)(iii)]
4) The permittee of the affected source shall comply with 40 CFR 63.1323(i) when process changes are made. [40 CFR 63.1322(g)(1)(iv)]

B) Comply with the requirements of 40 CFR 63.1322(f)(1); [40 CFR 63.1322(g)(2)]
C) Comply with the requirements of 40 CFR 63.1322(f)(2); or [40 CFR 63.1322(g)(3)]
D) Comply with the requirements of 40 CFR 63.1322(h). [40 CFR 63.1322(g)(4)]

Compliance Demonstration Methods:

a. Compliance shall be demonstrated by determining the group status of each batch process vent in accordance with the provisions of 40 CFR 63.1323. Whenever process changes are made that affect one or more Group 2 batch process vents that could change a Group 2 batch process vent to a Group 1 batch process vent or reduce the batch mass input limitation for the Group 2 batch process vent(s), the permittee shall comply with the redetermination provisions of 40 CFR 63.1323(i).

b. Compliance shall be demonstrated by determining the "batch mass input limitation" of each batch process vent as specified in 40 CFR 63.1325(g).

c. See **Specific Recordkeeping Requirements 5.** and **Specific Reporting Requirements 6.** below.

2. Emission Limitations:

Pursuant to 40 CFR 63.1323(d), the annual TOC or organic HAP emissions from each Group 2 batch process vent shall not exceed 11,800 kg/yr if the permittee is complying with the provisions of 40 CFR 63.1322(g).

Compliance Demonstration Method:

Compliance with the emission limitations is demonstrated when complying with **Operating Limitations 1.** above.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

The permittee shall monitor and maintain records of all information required by 40 CFR 63, Subpart JJJ, as specified in **5. Specific Recordkeeping Requirements.**

5. Specific Recordkeeping Requirements:

a. Group determination records for batch process vents: [40 CFR 63.1326(a)]
Except as provided in 40 CFR63.1324(a)(7) and (a)(8), the permittee of an affected source shall maintain the records specified in 40 CFR 63.1324(a)(1) through (a)(6) for each batch process vent subject to the group determination procedures of 40 CFR 63.1323. Except for 40 CFR 63.1326(a)(1) of this section, the records required by this paragraph (a) are restricted to the information developed and used to make the group

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

determination under 40 CFR 63.1323(b) through 63.1323(g), as appropriate. If the permittee did not need to develop certain information (e.g., annual average batch vent flow rate) to determine the group status, this paragraph a. does not require that additional information be developed.

i) An identification of each unique product that has emissions from one or more batch emission episodes venting from the batch process vent, along with an identification of the single highest-HAP recipe for each product and the mass of HAP fed to the reactor for that recipe.

ii) A description of, and an emission estimate for, each batch emission episode, and the total emissions associated with one batch cycle, as described in either 40 CFR 63.1326(a)(2)(i) or (a)(2)(ii), as appropriate.
   A) If the group determination is based on the expected mix of products, records shall include the emission estimates for the single highest-HAP recipe of each unique product identified in paragraph (a)(1) of this section that was considered in making the group determination under Sec. 63.1323.
   B) If the group determination is based on the single highest-HAP recipe (considering all products produced or processed in the batch unit operation), records shall include the emission estimates for the single highest-HAP recipe.

iii) Total annual uncontrolled TOC or organic HAP emissions, determined at the exit from the batch unit operation before any control device, determined in accordance with 40 CFR63.1323(b).
   A) For Group 2 batch process vents, said emissions shall be determined at the batch mass input limitation.

iv) The annual average batch vent flow rate for the batch process vent, determined in accordance with 40 CFR 63.1323(e).

v) The cutoff flow rate, determined in accordance with 40 CFR 63.1323(f).

vi) The results of the batch process vent group determination, conducted in accordance with 40 CFR 63.1323(g).

vii) If a batch process vent is subject to 40 CFR 63.1322(a) or (b), none of the records in 40 CFR 63.1326(a)(1) through (a)(6) are required.

viii) If the total annual emissions from the batch process vent during the group determination are less than the appropriate level specified in 40 CFR 63.1323(d), only the records in 40 CFR 63.1326(a)(1) through (a)(3) are required.

ix) For each Group 2 batch process vent that is exempt from the batch mass input limitation provisions because it meets the criteria of 40 CFR 63.1322(h), the records specified in 40 CFR 63.1326(a)(9)(i) and (ii) shall be maintained.
   A) Documentation of the maximum design capacity of the TPPU; and
   B) The mass of HAP or material that can be charged annually to the batch unit operation at the maximum design capacity.

b. Group 2 batch process vent continuous compliance records. [40 CFR 63.1326(d)]
The permittee of a Group 2 batch process vent shall comply with either 40 CFR 63.1326(d)(1) or (d)(2), as appropriate.

i) The permittee of a Group 2 batch process vent that has chosen to comply with 40 CFR 63.1322(g) shall keep the following records readily accessible:
   A) Records designating the established batch mass input limitation required by 40 CFR 63.1322(g)(1) and specified in 40 CFR 63.1325(g).

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B) Records specifying the mass of HAP or material charged to the batch unit operation.

ii) The owner or operator of a Group 2 batch process vent that has chosen to comply with 40 CFR 63.1322(f) shall keep the following records readily accessible:

A) Records designating the established batch mass input limitation required by 40 CFR 63.1322(f)(1) and specified in 40 CFR 63.1325(g).

B) Records specifying the mass of HAP or material charged to the batch unit operation.

c. Documentation supporting the establishment of the batch mass input limitation shall include the information specified in 40 CFR 63.1326(g)(1) through (g)(5) of, as appropriate. [40 CFR 63.1326(g)]

i) Identification of whether the purpose of the batch mass input limitation is to comply with 40 CFR 63.1322(f)(1) or (g)(1).

ii) Identification of whether the batch mass input limitation is based on the single highest-HAP recipe (considering all products) or on the expected mix of products for the batch process vent as allowed under 40 CFR 63.1323(a)(1).

iii) Definition of the operating year, for the purposes of determining compliance with the batch mass input limitation.

iv) If the batch mass input limitation is based on the expected mix of products, the permittee shall provide documentation that describes as many scenarios for differing mixes of products (i.e., how many of each type of product) as the permittee desires the flexibility to accomplish. Alternatively, the permittee shall provide a description of the relationship among the mix of products that will allow a determination of compliance with the batch mass input limitation under any number of scenarios.

v) The mass of HAP or material allowed to be charged to the batch unit operation per year under the batch mass input limitation.

d. See **Section D.3, General Recordkeeping Requirements** for further requirements.

6. Specific Reporting Requirements:

a. The permittee of a batch process vent at an affected source shall submit the following information, as appropriate, as part of the Notification of Compliance Status specified in 40 CFR 63.1335(e)(5). [40 CFR 63.1327(a)]

i) For each Group 2 batch process vent with annual emissions less than the level specified in 40 CFR 63.1323(d) (i.e. complying with 40 CFR 63.1322(g)), the information specified in 40 CFR 63.1326(d)(1)(i).

ii) For each Group 2 batch process vent with annual emissions greater than or equal to the level specified in 40 CFR 63.1323(d) (i.e. complying with 40 CFR 63.1322(f)), the information specified in 40 CFR 63.1326(d)(2)(i).

iii) For each batch process vent subject to the group determination procedures, the information specified in 40 CFR 63.1326(a), as appropriate.

iv) For each Group 2 batch process vent that is exempt from the batch mass input limitation provisions because it meets the criteria of 40 CFR 63.1322(h), the information specified in 40 CFR 63.1326(a)(1) through (3), and the information specified in 40 CFR 63.1326(a)(4) through (6) as applicable, calculated at the conditions specified in 40 CFR 63.1322(h).

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

v) When engineering assessment has been used to estimate emissions from a batch emissions episode and the criteria specified in 40 CFR 63.1323(b)(6)(i)(A) or (B) have been met, the permittee shall submit the information demonstrating that the criteria specified in 40 CFR 63.1323(b)(6)(i)(A) or (B) have been met as part of the Notification of Compliance Status required by 40 CFR 63.1335(e)(5).

b. Whenever a process change, as defined in 40 CFR 63.1323(i)(1), is made that causes a Group 2 batch process vent to become a Group 1 batch process vent, the permittee shall notify the DAQ and submit a description of the process change within 180 days after the process change is made or with the next Periodic Report, whichever is later. The permittee of an affected source shall comply with the Group 1 batch process vent provisions in 40 CFR 63.1321 through 63.1327 in accordance with 40 CFR 63.480(i)(2)(ii). [40 CFR 63.1327(b)]

c. Whenever a process change, as defined in 40 CFR 63.1323(i)(1), is made that causes a Group 2 batch process vent with annual emissions less than the level specified in 40 CFR 63.1323(d) for which the permittee has chosen to comply with 40 CFR 63.1322(g) to have annual emissions greater than or equal to the level specified in 40 CFR 63.1323(d) but remains a Group 2 batch process vent, or if a process change is made that requires the owner or operator to redetermine the batch mass input limitation as specified in 40 CFR 63.1323(i)(3), the permittee shall submit a report within 180 days after the process change is made or with the next Periodic Report, whichever is later. The following information shall be submitted: [40 CFR 63.1327(c)]
   i) A description of the process change;
   ii) The batch mass input limitation determined in accordance with 40 CFR 63.1322(f)(1).

d. The permittee is not required to submit a report of a process change if one of the conditions specified below is met: [40 CFR 63.1327(e)]
   i) The change does not meet the description of a process change in 40 CFR 63.1323(i) or (j).
   ii) The redetermination group status remains Group 2 for an individual batch process vent with annual emissions greater than or equal to the level specified in 40 CFR 1323(d) and the batch mass input limitation does not decrease, a Group 2 batch process vent with annual emission less than the level specified in 40 CFR 1323(d) complying with 40 CFR 63.1322(g) continue to have emission less than the level specified in 40 CFR 63.1323(d) and the batch mass input limitation does not decrease, or the achieved emission reduction remains at 84 percent or greater for new SAN affected sources using a batch process.

d. See **Section D.4, General Recordkeeping Requirements** for general recordkeeping requirements.

7. Specific Control Equipment Operating Conditions:
None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

8. Alternate Operating Scenarios:
None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EMISSION GROUP 03: CONTINUOUS PROCESS VENTS, PLANT 1 (MASS PLANT)

Primary Product: Polystyrene Pellets
Control Equipment: None
Description: Group 2 continuous process vents per 40 CFR 63, Subpart JJJ

Emission Point M07 (Vacuum Pump Vent)

Maximum Capacity: 19,200 lbs/hr (6,300 lb/hr for Line 1; 2,520 lb/hr for Line 2; and 10,380 lb/hr for Line 3)

Description: EP M07 exhausts the following equipment:

1. Line 1 Pregrafter Reactor (R-1210)
2. Line 1 Prepoly Reactor (R-1310) (vents through Prepoly Condenser)
3. Line 1 Prepoly Condenser (C-1310)
4. Line 1 Devolatizer (D-1710) (vents through DV-1Condenser System)
5. DV-1 Condenser System (C-1810) (vents through D-1110)
6. Line 1 Recycle Tank (D-1110)
7. Line 1 Devolatizer 2 (D-1720) (vents through DV-2 Condenser System)
8. DV-2 Condenser System (C-1820)
9. Line 3 Pregrafter Reactor (R-3210)
10. Line 3 Prepoly Reactor (R-3310) (vents through Prepoly Condenser)
11. Line 3 Prepoly Condenser (C-3315)
12. Line 3 Tower 2 Reactor (R-3510)
13. Line 3 Devolatizer 1 (D-3710) (vents through DV-1 Condenser)
14. Line 3 DV-1 Condenser (C-3810) (vents through D-3110)
15. Line 3 Recycle Tank (D-3110)
16. Line 3 Devolatizer 2 (D-3820) (vents through DV-2 Condenser)
17. DV-2 Condenser (C-3820)
18. Line 2 DV Condenser (C-2710)
19. Line 2 Condensate Tank (D-0660)

Emission Point M08B (Take Off Lines Vent)

Description: EP M08B exhausts the following equipment:

20. Die Head Line 3
21. Die Heads 1 and 2 – Line 1

The following equipment is part of the continuous polymerization lines, however no HAPs and VOC are emitted to atmosphere from this equipment:

Continuous Polymerization Lines Equipment

22. Line 1 Feed Preheaters (E-1010 and E-1020)
23. Line 1 Tower Reactor (R-1410)
24. Line 1 DV Preheater (E-1610)
25. Line 3 Feed Preheaters (E3010), E-3020, and E-3030)
26. Line 3 U-Tube Reactor (R-3410)
27. Line 3 DV Preheater (E-3610)

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 3(xx) incorporates by reference *40 CFR Part 63.1310 to 63.1336 (Subpart JJJ), "National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins"* - applies to EP M07. EP M08B (Take Off Lines Vent) and the Continuous Polymerization Lines Equipment are exempt from the requirements of Subpart JJJ pursuant to 40 CFR 63.1310(d)(4) and 40 CFR 63.1310(b), respectively.

1. **Operating Limitations:**
   a. The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3 (a), apply to the Group 2 continuous process vents, except when otherwise specified in 40 CFR 63, Subpart JJJ. Table 1 to Subpart JJJ of Part 63 specifies the provisions of Subpart A that apply and those that do not apply. [40 CFR Part 63.1311(f)]

   b. In accordance with 40 CFR 63.1315(d), for the affected sources listed in this section the permittee shall comply with the emissions control provisions of 40 CFR 63.1316, the monitoring provisions of 40 CFR 63.1317, the testing and compliance provisions of 40 CFR 63.1318, the recordkeeping provisions of 40 CFR 63.1319, and the reporting provisions of 40 CFR 63.1320.

   Compliance Demonstration Method:
   See **Testing Requirements 3., Specific Monitoring Requirements 4.** and **Specific Recordkeeping Requirements 5.** below.

2. **Emission Limitations:**
   In accordance with 40 CFR 63.1316(c), the permittee has elected to comply with the following emission limit, which shall be instead of the requirements specified at 40 CFR Part 60, Subpart DDD:

   The organic HAP emissions from all continuous process vents in each individual material recovery section shall, as a whole, be no greater than 0.0036 kg organic HAP per Mg of product from the associated thermoplastic product process unit TPPU(s); or alternatively, organic HAP emissions from all continuous process vents in the collection of material recovery sections within the affected source shall, as a whole, be no greater than 0.0036 kg organic HAP per Mg of product from all associated TPPU(s). [40 CFR 63.1316(c)(1)(i)]

   Compliance Demonstration Method:
   See **Testing Requirements 3., Specific Monitoring Requirements 4.** and **Specific Recordkeeping Requirements 5.** below. Pursuant to 40 CFR 63.1316(c), compliance can be based on either organic HAP or TOC. The permittee has conducted requisite performance testing on November 16, 1996 and demonstrated compliance with **Emission Limitation 2.**

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

a. Pursuant to 40 CFR 63.1318(c), compliance with **Emission Limitation 2.** above shall be demonstrated using the following equation as specified in 40 CFR 63.1318(b)(1)(i):

$$ER = \sum_{i=1}^{n} \frac{Ei}{(0.001\,Pp)}$$

where:

ER = Emission rate of total organic HAP or TOC, kg/Mg product.
E_i = Emission rate of total organic HAP or TOC in continuous process vent i, kg/hr.
P_p = The rate of polymer produced, kg/hr.
n = Number of continuous process vents in the collection of material recovery sections at the affected source.
0.001 = Conversion factor, kg to Mg.

b. Within 180 days after the final issuance of permit V-06-046, pursuant to 40 CFR 63.1318(b)(1)(i), the mass emission rate for each continuous process vent, E_i, shall be determined according to the procedures specified in 40 CFR 63.116(c)(4). When the provisions of 40 CFR 63.116(c)(4) specify that Method 18, 40 CFR part 60, appendix A shall be used, Method 18 or Method 25A, 40 CFR part 60, appendix A may be used for the purposes of Subpart JJJ. The use of Method 25A, 40 CFR part 60, appendix A shall comply with 40 CFR 63.1318(b)(1)(i)(A) and (b)(1)(i)(B).

c. Pursuant to 40 CFR 63.1318(b)(1)(ii), the rate of polymer produced, P_p (kg/hr), shall be determined by dividing the weight (kg) of polymer pulled from the process line during the performance test by the number of hours taken to perform the performance test. The weight of polymer pulled shall be determined by direct measurement or by an alternate methodology, such as materials balance. If an alternate methodology is used, a description of the methodology, including all procedures, data, and assumptions shall be submitted as part of the Notification of Compliance Status required by 40 CFR 63.1335(e)(5).

4. Specific Monitoring Requirements:

a. In accordance with 40 CFR 63.1317, the permittee shall comply with the applicable compliance monitoring provisions specified for continuous process vents in 40 CFR 1315(a), except references to group determinations (i.e., total resource effectiveness) do not apply and owners or operators are not required to comply with 40 CFR 63.113.

b. The permittee shall monitor the daily average rate of polymer produced, kg/hr. If the average production rate (kg/hr calculated on daily basis) exceeds the production rate (Pp) as calculated in **3.c Testing Requirements** by 10%, then the source shall repeat the testing to ensure compliance with **2. Emission Limitations** at the increased production rate. If a process rate is increased above the rate specified in the equipment description, the permittee is required to notify DAQ and apply for a permit modification.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. The permittee shall monitor the devolatilization section vacuum level to indicate whether the recover system/vacuum system is operating as designed and compliance tested. Periods when the vacuum level exceeds 50 torr based on a 15-minute rolling average shall be recorded in a log.

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of the most recent performance testing results and monitoring results. Refer to **Testing Requirements 3.** and **Specific Monitoring Requirements 4.**

b. See **Section D.3** for further requirements.

6. Specific Reporting Requirements:

See **Section D.4** for further requirements.

7. Alternate Operating Scenarios:

None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EMISSION GROUP 04 – STORAGE VESSELS, PLANT 1 (MASS PLANT)

Control Equipment: None

Emission Point	Description*	Capacity (gallons)	Construction Date
M01	Styrene Tank (TK-0340)	46,000	07/07/78
M02	Rubber Solution Tank (TK-0440) (Group 2 Storage Tank)	51,000	07/23/84
M03	Rubber Solution Tank (TK-0450) (Group 2 Storage Tank)	51,000	07/23/84
M04	Rubber Solution Tank (TK-0460) (Group 2 Storage Tank)	30,000	01/01/94
M05	Rubber Solution Tank (TK-0470) (Group 2 Storage Tank)	30,000	01/01/94
M09	1. Styrene Hill Tank (TK-0040) 2. Styrene Hill Tank (TK-0050)	1,250,000 1,250,000	03/30/99 03/30/99

*Each tank is a fixed-roof tank.

EMISSION GROUP 05 – STORAGE VESSELS, PLANT 3 (SUSPENSION PLANT)

Control Equipment: None

Emission Point	Description*	Capacity (gallons)	Construction Date
S01	Hill Styrene Monomer Tank (TK-0010)	700,000	11/17/85
S02	Hill Styrene Monomer Tank (TK-0020)	700,000	04/17/89
S03	Hill Styrene Monomer Tank (TK-0030)	850,000	10/28/94
S04	Styrene Monomer Day Tank (TK-0310)	100,000	07/18/91
S05	Styrene Monomer Batch Tank (TK-0320)	14,000	04/26/89

*Each tank is a fixed-roof tank.

EMISSION GROUP 06 – SHORE LINE STORAGE VESSELS

Control Equipment: None

Emission Point	Description*	Capacity (gallons)	Construction Date
X01	Shoreline Styrene Monomer Day Tank (TK-0300)	300,000	07/07/78
X02	Shoreline Styrene Monomer Day Tank (TK-0305)	300,000	07/07/78

*Each tank is a fixed-roof tank.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 3(xx) incorporates by reference *40 CFR Part 63.1310 to 63.1336 (Subpart JJJ), "National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins"* – applies to EP M02, M03, M04, and M05 (Group 2 storage tanks). EP M01, M09, S01, S02, S03, S04, S05, X01, and X02 store styrene and are located at existing affected sources; therefore, pursuant to 40 CFR 63.1314(d), these tanks are not subject to the requirements of Subpart JJJ.

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   None

3. **Testing Requirements:**
   None

4. **Specific Monitoring Requirements:**
   None

5. **Specific Recordkeeping Requirements:**
   a. Pursuant to 40 CFR 63.1314(a) and 40 CFR 63.119(a)(3), the permittee shall keep the following records for each of the Group 2 storage tanks, M02, M03, M04, and M05:

      The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept as long as the storage vessel retains Group 2 status and is in operation. For each of these Group 2 storage vessels, the permittee is not required to comply with any other provisions of 40 CFR 63.119 through 63.123 other than those required by this paragraph. [40 CFR 63.123(a)]

   b. See **Section D.3** for further requirements.

6. **Specific Reporting Requirements:**
   None

7. **Specific Control Equipment Operating Conditions:**
   None

8. **Alternate Operating Scenarios:**
   None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Point: 07 - Plant 1 and Plant 3 - Pipeline Equipment Leak Provisions

Description: Fugitive emissions from Process and Storage Pipeline Equipment including Light Liquid Pumps, Gas Valves, Gas Flanges, Gas Open Ended Valves, Gas PSVs, Liquid Valves, and Liquid Flanges. The component count includes 867 valves, 1,476 connectors (flanges), and 52 pump seals.*

*The equipment component count listed above reflects an accurate count of the equipment as of the date of issuance of this permit but is not intended to limit the permittee to the exact numbers specified. The permittee may add or remove pipeline equipment without a permit revision as long as the equipment continues to comply with the requirements listed below.

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 3(xx), which incorporates by reference *40 CFR Part 63.1310 to 63.1336 (Subpart JJJ), "National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins"* applies to EP 07. The requirements of Subpart JJJ incorporate by reference 40 CFR 63 Subpart H, *National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks*, with the differences noted in 40 CFR 63.1331(a)(1) through (a)(10).

1. **Operating Limitations:**
   a. Pursuant to 40 CFR 63.1331(a), for the pipeline equipment in organic hazardous air pollutant service, the permittee shall implement a leak detection and repair (LDAR) program in accordance with 40 CFR 63, Subpart H containing the following elements:
      i) Each piece of pipeline equipment within Plant 1 (Mass Plant) and Plant 3 (Suspension Plant) subject to 40 CFR 63 Subpart JJJ shall be identified such that it can be distinguished readily from equipment that is not subject to 40 CFR 63 Subpart H. [40 CFR 63.162(c)]
      ii) When a leak is detected as specified in 40 CFR 63.163 and 63.164; 63.168 and 636.169; and 63.172 through 63.174, the permittee shall comply as follows: [40 CFR 63.162(f)]
         A) Clearly identify the leaking equipment.
         B) The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 63.175(e)(7)(i)(D), and no leak has been detected during the follow-up monitoring. If the permittee elects to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored and no leak is detected during that monitoring.
         C) The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector that is subject to 40 CFR 63.174(c)(1)(i), may be removed after it is repaired.
      iii) Specific standards for each type of pipeline equipment described under **Emission Limitations 2** below.

Compliance Demonstration Method:

Compliance shall be determined by review of the records required by 40 CFR 63.181 and the reports required by 40 CFR 63.182, review of performance test results, and by inspections. [40 CFR 63.162(a)]

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations:

a. Pursuant to 40 CFR 63.1331(a), the permittee shall comply with the fugitive emissions standards of 40 CFR 63, Subpart H, as applicable. See below for detailed standards for different services:

i) Standards: Pumps in light liquid service [40 CFR 63.163]:

40 CFR 63.163(a):	Implementation and compliance provisions
40 CFR 63.163(b):	Monitoring requirements, leak detection levels, frequency of monitoring
40 CFR 63.163(c):	Repair procedures and time frames
40 CFR 63.163(d):	Procedures to determine percent leaking pumps and quality improvement program requirements
40 CFR 63.163(e)-(j):	Exemptions for specific types of pumps

ii) Standards: Pressure relief devices in gas/vapor service [40 CFR 63.165]:

40 CFR 63.165(a):	Operational requirements
40 CFR 63.165(b):	Pressure release procedures
40 CFR 63.165(c)-(d):	Exemptions for specific types of pressure relief devices

iii) Standards: Open-ended valves or lines [40 CFR 63.167]:

40 CFR 63.167(a)-(c):	Operational requirements
40 CFR 63.167(d)-(e):	Exemptions for specific types of valves

iv) Standards: Valves in gas/vapor service and in light liquid service [40 CFR 63.168]:

40 CFR 63.168(a):	Operational requirements
40 CFR 63.168(b)-(d):	Monitoring requirements and intervals
40 CFR 63.168(e):	Procedures to determine percent leaking valves
40 CFR 63.168(f):	Leak repair time frames
40 CFR 63.168(g):	First attempt repair procedures
40 CFR 63.168(h):	Exemptions for unsafe-to-monitor valves
40 CFR 63.168(i):	Exemptions for difficult-to-monitor valves

v) Standards: Delay of repair [40 CFR 63.171]:

40 CFR 63.171	Allowances for delay of repair

vi) Standards: connectors in gas/vapor service and in light liquid service [40 CFR 63.174]:

40 CFR 63.174(a):	Operational requirements
40 CFR 63.174(b):	Monitoring requirements and intervals
40 CFR 63.174(c):	Procedures for open connectors or connectors with broken seals
40 CFR 63.174(d):	Leak repair time frames
40 CFR 63.174(e):	Monitoring frequency for repaired connectors
40 CFR 63.174(f)-(h):	Exemptions for unsafe-to-monitor, unsafe-to-repair, inaccessible, or ceramic connectors
40 CFR 63.174(i):	Procedures to determine percent leaking connectors
40 CFR 63.174(j):	Optional credit for removed connectors

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

vii) Quality improvement program for valves [40 CFR 63.175]:

Pursuant to 40 CFR 63.168(d)(1)(ii), in Phase III, the permittee may elect to implement the following quality improvement programs if the percent of leaking valves is equal to or exceeds 2 percent:

40 CFR 63.175(a):	Quality improvement program alternatives
40 CFR 63.175(b):	Criteria for ending quality improvement programs
40 CFR 63.175(c):	Alternatives following achievement of less than 2 percent leaking valves target
40 CFR 63.175(d):	Quality improvement program to demonstrate further progress
40 CFR 63.175(e):	Quality improvement program of technology review and improvement

viii) Quality improvement program for pumps [40 CFR 63.176]:

Pursuant to 40 CFR 63.163(d)(2), if, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps or three pumps in the Plant 1 (Mass Plant) and Plant 3 (Suspension Plant) leak, the permittee shall implement the following quality improvement programs for pumps:

40 CFR 63.176(a):	Applicability criteria
40 CFR 63.176(b):	Criteria for ending the quality improvement program
40 CFR 63.176(c):	Criteria for resumption of the quality improvement program
40 CFR 63.176(d):	Quality improvement program elements

Compliance Demonstration Method:

a. Compliance shall be determined by review of the records required by 40 CFR 63.181 and the reports required by 40 CFR 63.182, review of performance test results, and by inspections. [40 CFR 63.162(a)]

b. A copy of the leak detection and repair (LDAR) program meeting the criteria listed above shall be kept available at a readily accessible location for inspection.

3. Testing Requirements:

a. The permittee shall comply with the following test methods and procedures requirements pursuant to 40 CFR 63.180(a):

i) Monitoring shall comply with Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.180(b)(1)]

ii) Except as provided for in paragraph iii below, the detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in Section 3.1.2(a) of Method 21 shall be for the average composition of the process fluid not each individual VOC in the stream. For process streams that contain nitrogen, water, air, or other inerts which are not organic HAPs or VOCs, the average stream response factor may be calculated on an inert-free basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted. If no instrument is available at the plant site that will meet the performance criteria, the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

free basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted.[40 CFR 63.180(b)(2)(i)]

iii) If no instrument is available at the plant site that will meet the performance criteria specified in paragraph ii above, the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis as described in paragraph ii above.[40 CFR 63.180(b)(2)(ii)]

iv) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.180(b)(3)]

v) Calibration gases shall be: [40 CFR 63.180(b)(4)]
   A) Zero air (less than 10 parts per million of hydrocarbon in air); and
   B) Mixtures of methane in air at the concentrations specified in 40 CFR 63.180(b)(4)(ii)(A) through (b)(4)(ii)(C). A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in 40 CFR 63.180(b)(2)(i). In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.
   C) The instrument may be calibrated at a higher methane concentration than the concentration specified for that piece of equipment. The concentration of the calibration gas may exceed the concentration specified as a leak by no more than 2,000 parts per million. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 parts per million above the concentration specified as a leak and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 parts per million. If only one scale on an instrument will be used during monitoring, the permittee need not calibrate the scales that will not be used during that day's monitoring.

vi) Monitoring shall be performed when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor. [40 CFR 63.180(b)(5)]

vii) Monitoring data that do not meet the criteria specified in 40 CFR 63.180(b)(1) through (b)(5) may be used to qualify for less frequent monitoring under the provisions in 40 CFR 63.168(d)(2) and (d)(3) or 63.174(b)(3)(ii) or (b)(3)(iii) provided the data meet the following conditions. [40 CFR 63.180(b)(6)]
   A) The data were obtained before April 22, 1994.
   B) The departures from the criteria specified in 40 CFR 63.180(b)(1) through (b)(5) or from the specified monitoring frequency of 40 CFR 63.168(c) are minor and do not significantly affect the quality of the data. Examples of minor departures are monitoring at a slightly different frequency (such as every six weeks instead of monthly or quarterly), following the performance criteria of section 3.1.2(a) of Method 21 of appendix A of 40 CFR part 60 instead of 40 CFR 63.180(b)(2), or monitoring at a different leak definition if the data would indicate the presence or absence of a leak at the concentration specified in this subpart. Failure to use a calibrated instrument is not considered a minor departure.

viii) When equipment is monitored for compliance as required in 40 CFR 63.164(i), 63.165(a), and 63.172(f) or when equipment subject to a leak definition of 500 ppm is monitored for leaks as required by 40 CFR 63 Subpart H, the permittee may elect to adjust or not to adjust the instrument readings for background. If the permittee elects

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

to not adjust instrument readings for background, the permittee shall monitor the equipment according to the procedures specified in 40 CFR 63.180(b)(1) through (b)(4). In such case, all instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If the permittee elects to adjust instrument readings for background, the permittee shall monitor the equipment according to the following procedures. [40 CFR 63.180(c)]

A) The requirements of 40 CFR 63.180(b)(1) through (4) shall apply.

B) The background level shall be determined, using the same procedures that will be used to determine whether the equipment is leaking.

C) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 CFR part 60, appendix A.

D) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 parts per million for determining compliance.

viii)A) Each piece of equipment within a process unit that can reasonably be expected to contain equipment in organic HAP service is presumed to be in organic HAP service unless the permittee demonstrates that the piece of equipment is not in organic HAP service. For a piece of equipment to be considered not in organic HAP service, it must be determined that the percent organic HAP content can be reasonably expected not to exceed 5 percent by weight on an annual average basis. For purposes of determining the percent organic HAP content of the process fluid that is contained in or contacts equipment, Method 18 of 40 CFR part 60, appendix A shall be used. [40 CFR 63.180(d)]

B) 1) The permittee may use good engineering judgment rather than the procedures in 40 CFR 63.180(d)(1) to determine that the percent organic HAP content does not exceed 5 percent by weight. When the permittee and the Division do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in 40 CFR 63.180(d)(1) shall be used to resolve the disagreement.

2) Conversely, the permittee may determine that the organic HAP content of the process fluid does not exceed 5 percent by weight by, for example, accounting for 98 percent of the content and showing that organic HAP is less than 3 percent.

C) If the permittee determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in 40 CFR 63.180(d)(1), or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.

D) Samples used in determining the percent organic HAP content shall be representative of the process fluid that is contained in or contacts the equipment.

b. When the provisions of paragraph a. above specify that Method 18, 40 CFR part 60, appendix A, shall be used, Method 18 or Method 25A, 40 CFR part 50, appendix A, may be used for the purposes of 40 CFR 63, Subpart JJJ. The use of Method 25A, 40 CFR part 60, appendix A, shall conform with the requirements of paragraphs 40 CFR 63.1331(a)(8)(i) and (ii). [40 CFR 63.1331(a)(8)]

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

a. Refer to **Testing Requirements 3.**

b. Fulfill all monitoring requirements per **Emission Limitations 2.**

5. Specific Recordkeeping Requirements:

a. The permittee may comply with the recordkeeping requirements for the equipment in the Plant 1 (Mass Plant) and Plant 3 (Suspension Plant) in one recordkeeping system if the system identifies each record by process unit and the program being implemented (e.g., quarterly monitoring, quality improvement) for each type of equipment. All records required by 40 CFR 63.181 shall be maintained in a manner that can be readily accessed at the plant site. [40 CFR 63.181(a)]

b. The permittee shall maintain all records pertaining to the pipeline equipment required by 40 CFR 63.181(b).

i) A) A list of identification numbers for equipment (except instrumentation systems) subject to the requirements of this subpart. [40 CFR 63.181(b)(1)(i)]

B) A schedule by process unit for monitoring connectors subject to 40 CFR 63.174(a) and valves subject to 40 CFR 63.168(d).

C) Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment subject to the provisions of this subpart may be identified on a plant site plan, in log entries, or by other appropriate methods.

ii) A) A list of identification numbers for equipment that the permittee elects to equip with a closed-vent system and control device, under the provisions of 40 CFR 63.163(g), 63.164(h), 63.165(c), or 63.173(f). [40 CFR 63.181(b)(2)(i)]

B) A list of identification numbers for compressors that the permittee elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of 40 CFR 63.164(i).

iii) A list of identification numbers for pressure relief devices subject to 40 CFR 63.165(a) and for pressure relief devices equipped with rupture disks, under the provisions of 40 CFR 63.165(d). [40 CFR 63.181(b)(3)]

iv) Identification of instrumentation systems subject to 40 CFR 63 Subpart H. Individual components in an instrumentation system need not be identified.

v) Identification of screwed connectors subject to 40 CFR 63.174(c)(2). Identification can be by area or grouping as long as the total number within each group or area is recorded.

vi) The following information shall be recorded for each dual mechanical seal system:

A) Design criteria required in 40 CFR 63.163(e)(6)(i), 63.164(e)(2), and 63.173(d)(6)(i) and an explanation of the design criteria; and

B) Any changes to these criteria and the reasons for the changes.

vii) The following information pertaining to all pumps subject to 40 CFR 63.163(j), valves subject to 40 CFR 63.168(h) and (i), agitators subject to 40 CFR 63.173(h) through (j), and connectors subject to 40 CFR 63.174(f) and (g) shall be recorded:

A) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment.

C) A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair.

viii)A) A list of valves removed from and added to the process unit, as described in 40 CFR 63.168(e)(1), if the net credits for removed valves is expected to be used.

B) A list of connectors removed from and added to the process unit, as described in 40 CFR 63.174(i)(1), and documentation of the integrity of the weld for any removed connectors, as required in 40 CFR 63.174(j). This is not required unless the net credits for removed connectors is expected to be used.

ix) For any leaks detected as specified in 40 CFR 63.163 and 63.164; 63.168; and 63.172 through 63.174, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

h. For visual inspections, the permittee shall document that the inspection was conducted and the date of the inspection. These records shall be kept for two years. [40 CFR 63.181(c)]

i. When a leak is detected, the following information shall be recorded and kept for two years. [40 CFR 63.181(d)]

i) The instrument and the equipment identification number and the operator name, initials, or identification number.

ii) The date the leak was detected and the date of first attempt to repair the leak.

iii) The date of successful repair of the leak.

iv) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable.

v) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

A) The permittee may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by 40 CFR 63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

B) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

vi) Dates of process unit shutdowns that occur while the equipment is unrepaired.

vii)A) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in 40 CFR 63.174(b), as described in 40 CFR 63.174(c)(1), unless the permittee elects to comply with 63.174(c)(1)(ii).

B) The date and results of monitoring as required in 40 CFR 63.174(c). If identification of connectors that have been opened or otherwise had the seal broken is made by location under 40 CFR 63.181(d)(7)(i), then all connectors within the designated location shall be monitored.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

viii) Copies of the periodic reports as specified in 40 CFR 63.182(d), if records are not maintained on a computerized database capable of generating summary reports from the records.

j. If the permittee implements any of the quality improvement programs required by 40 CFR 63.175 or 63.176, the records specified in 40 CFR 63.181(h)(1) through (9) shall be maintained for a period of the quality improvement plan for the process unit.

6. Specific Reporting Requirements:

a. The Notification of Compliance Status required by 40 CFR 63.182(a)(2) and 63.182(c) shall be submitted within 150 days of the applicable compliance date specified in 40 CFR 63.1311. The permittee has fulfilled this requirement through documentation dated February 28, 1998 submitted to U.S. EPA Region IV and the Division.

b. The permittee shall submit the Periodic Reports containing the information specified in 40 CFR 63.182(a)(3) and 63.182(d), as required by 40 CFR 63.1335(e)(6).

c. See **Section D.5, Source Emission Limitations**.

d. Also refer to **Section F.5**.

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Point 09: Miscellaneous Process and Non-Process Equipment (Not Subject to 40 CFR 63 Subpart JJJ): Plant 3 – Suspension Plant (Polystyrene Beads Production)

Description: Process and Non-Process Equipment at Plant 3 - Suspension Plant that is not subject to 40 CFR 63, Subpart JJJ, including:
1. Two (2) Suspension Batch out Tanks TK-102 and TK-103, Stack: Roof Vent
2. 12,500 gallon Hydrochloric Acid Storage Tank TK-6100

Construction Date: 09/25/98

Control Equipment for HCl emissions from Emission Unit 1: Submerged Fill Pipe
Control Equipment for HCl emissions from Emission Unit 2: Packed Column Scrubber

APPLICABLE REGULATIONS:
401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances,* applies to the tanks above.

1. **Operating Limitations:**
None

2. **Emission Limitations**:
Pursuant to 401 KAR 63:020, Section D, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

Compliance Demonstration Method:
See **4. Specific Monitoring Requirements** and **7. Specific Control Equipment Operating Conditions**.

3. **Testing Requirements:**
None

4. **Specific Monitoring Requirements:**
a. The times when the HCl in the Batchout Tanks (Emission Units 1) is not added via a submerged fill pipe shall be recorded.

b. The scrubber shall be inspected to ensure liquid stream flow at the beginning of each fill event at the HCl storage tank (Emission Unit 2). Records shall be kept of times when there is no flow in the scrubber.

5. **Specific Recordkeeping Requirements**:
See **4. Specific Monitoring Requirements** and **7. Specific Control Equipment Operating Conditions**.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:
None

7. Specific Control Equipment Operating Conditions:

a. The hydrochloric acid solution shall be added to the tank via submerged fill pipe only for the two (2) Batchout tanks (Emission Unit 1 above) to meet the requirements of 401 KAR 63:020.

b. The HCl Storage Tank (Emission Unit 2) shall always vent through a packed column scrubber to meet the requirements of 401 KAR 63:020. The scrubber shall be operational at all the fill events.

c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specifications, a device for the measurement of liquid stream flow rates on the packed tower scrubber associated with storage tank (Emission Unit 2). The device shall be set to alarm when the flow is below the manufacturer's recommended minimum flow rate while the scrubber is operational.

8. Alternate Operating Scenarios:
None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Point: 08 - Plant 2 (Impregnated Polystyrene Beads Production) - Pipeline Equipment Leak Provisions

Description: Fugitive emissions from Process and Storage Pipeline Equipment including Light Liquid Pumps, Gas Valves, Gas Flanges, Gas Open Ended Valves, Gas PSVs, Liquid Valves, and Liquid Flanges. The Plant 2 component count includes 176 valves, 663 connectors (flanges), and 8 pump seals.*

*The equipment component count listed above reflects an accurate count of the equipment as of the date of issuance of this permit but is not intended to limit the permittee to the exact numbers specified. The permittee may add or remove pipeline equipment without a permit revision as long as the equipment continues to comply with the requirements listed below.

Emission Group 10 – Carbon Adsorbers, Plant 2 (Impregnated Polystyrene Beads Production)

Primary Product: Expanded Polystyrene (EPS)

Control Equipment: Two (2) Carbon Adsorbers (pentane recovery systems), each with a VOC control efficiency of at least 95%

Emission Point: 10 (Carbon Adsorber Exhaust Vents I01 and I02)

Maximum Rated Capacity: 9.01 tons/hr, total Plant 2

Description: EPS production line using Carbon Adsorber 01 or Carbon Adsorber 02 for pentane recovery with the following equipment connected to, and exhausting at, vent I01 or vent I02:

1. Three (3) Reactors (R-7110, R-7210, and R-7310), each is a 10,000 gallons pressure drum, constructed on 01/30/87, 04/07/89, and 10/04/89, respectively.
2. Two (2) Batchout tanks (D-7510 and D7520) with 20,000 gallons capacity each, and constructed on 01/30/87 and 10/04/89, respectively.
3. Two (2) Pentane storage tanks (TK-6410 and TK-6420), with 30,000 gallons capacity each, and both constructed on January 30, 1987.
4. One (1) Pentane weigh tank (D-6420), installed 1987
5. Pentane Reclaim storage tank (TK-6430), with 8,000 gallon capacity and constructed on 12/20/89.
6. Drying tank (D-7530), constructed on 03/21/00.
7. One (1) Reactor (R-7150), with a 10,000 gallon pressure drum, to be constructed in 2007.
8. One (1) Batchout tank (D-7550), with a 20,000 gallons capacity, to be constructed in 2007.
9. One (1) Pentane weigh tank (D-6450), to be constructed in 2007.
10. Drying tank (D-7570), to be constructed in 2007.
11. Two (2) HCl scrubbers.

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 3(xx) incorporates by reference *40 CFR Part 63.1310 to 63.1336 (Subpart JJJ), "National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins"* applies to the Thermoplastic Product Process Unit (Production of EPS, Expanded Polystyrene). However, according to 40 CFR 63.1310(c)(8), vessels and equipment storing and/or handling material that contain no organic HAP and/or organic HAP as impurities only, while included in the affected source, are not subject to the requirements of Subpart JJJ or Subpart A. EPS contains styrene only as an *impurity,* as such is defined at 40 CFR 63.101, since styrene is present in the raw material polystyrene beads.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

401 KAR 60:005, Sections 2 and 3(1)(ddd) incorporates by reference *40 CFR Part 60.560 to 60.566 (Subpart DDD), "Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry"* applies to the equipment leaks at Plant 2. Pursuant to 40 CFR 60.560(a)(2), the requirements of this rule are not applicable to the batch EPS processes since they are not a continuous process.

401 KAR 60:005, Sections 2 and 3(1)(q) incorporates by reference *40 CFR Part 60.110b to 60.117b(Subpart Kb), "Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984"* applies to two (2) Pentane storage tanks (TK-6410 and TK-6420).

40 CFR 64 Compliance Assurance Monitoring - applies to EP10 Reactors R-7110, R-7210, R-7310, and R-7150 for emissions of VOC.

NON-APPLICABLE REGULATIONS:

This source has elected to accept annual limits in order to preclude the applicability of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality* (PSD) for VOC emissions increases from two (2) separate source modifications described below:

MODIFICATION 01: MODIFICATION 01 is a VOC emissions increase affecting EP 10, emission units 2, 3, 5 and 6, as approved by the Division on December 19, 2003 as Revision 1 to Permit Number V-00-003. VOC emissions from EP 10 emission units 2, 3, 5 and 6 shall be controlled by the Carbon Adsorber (01 or 02) with a minimum control efficiency of 95%.

MODIFICATION 02: MODIFICATION 02 is a VOC emissions increase affecting EP 10, emission units 7, 8, 9 and 10, and EP 12B (Boiler BLR-8860 listed in subsequent Section B), as approved by the Division upon issuance of this Permit Number V-06-046. VOC emissions from EP 10 emission units 7, 8, 9 and 10 shall be controlled by the Carbon Adsorber (01 or 02) with a minimum control efficiency of 95%.

1. Operating Limitations:

a. Pursuant to 40 CFR 60.1, the permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 401 KAR 60:005 Section 3, except as otherwise specified in 40 CFR Part 60, Subpart DDD.

b. To preclude the applicability 401 KAR 51:017, *PSD*, the MODIFICATION 01 emission units 2, 3, 5 and 6 and MODIFICATION 02 emission units 7, 8, 9 and 10 shall always be vented to the Carbon Adsorber 01 or 02 to control the VOC emissions.

c. In accordance with 40 CFR 60.112b(a)(3), the permittee shall equip storage tanks TK-6410 and TK-6420 with a closed vent system and control device meeting the following specifications:

i) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, 40 CFR 60.485(b).

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

ii) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater.

d. In accordance with 40 CFR 560(a)(4) and 40 CFR 60.562-2, for the fugitive emissions equipment (as defined in 40 CFR 60.561), the permittee shall implement a leak detection and repair (LDAR) program in accordance with 40 CFR 60.482-1 through 60.482-10, except as otherwise indicated in 40 CFR 60 Subpart DDD or 40 CFR 60 Subpart VV. See **2.c Emission Limitations** below.

Compliance Demonstration Method:

a. A "process flow diagram" shall always be kept at the plant site showing how the above MODIFICATION 01 and 02 emissions units are routed via a closed vent system to each respective control device.

b. The permittee shall maintain records of all periods when the emission units associated with MODIFICATION 01 and 02 are not vented to the carbon adsorber, and the reason for the deviation. If the emission units associated with MODIFICATION 01 or 02 are not vented to the carbon adsorbers, the permittee shall submit material balance calculations to show that the emissions are below the limits specified at **2.a and 2.b Emissions Limitations** below.

c. Also see the **Testing Requirements 3., Recordkeeping Requirements 4., Reporting Requirements 5., and Specific Control Equipment Operating Conditions 7. below**.

d. For compliance with visual inspections for the closed vent system, Method 21 shall be used to determine the presence of leaking source. Also see 40 CFR 60.485(d).

2. Emission Limitations:

a. The total VOC emissions from MODIFICATION 01 (emission units 2, 3, 5 and 6) shall not exceed 10.51 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This limitation is below the 40 ton per year PSD significant emissions increase threshold for VOC and the requirements of 401 KAR 51:017 do not apply.

b. The total VOC emissions from the MODIFICATION 02 (emission units 7, 8, 9 and 10) shall not exceed 26.6 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This limitation, plus VOC emitted from EP 12B (new boiler), is below the 40 ton per year significant emissions increase threshold for VOC and 401 KAR 51:017 does not apply.

c. Pursuant to 40 CFR 60.592(a), the permittee shall comply with the requirements of 40 CFR 60.482-1 to 60.482-10 (Subpart VV) as specified below:

i) Pursuant to 40 CFR 60.482-2 (*Standards: Pumps in Light Liquid Service*), the permittee shall comply with the following requirements:

A) Each pump in light liquid service shall:

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1) be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and paragraphs D), E), and F) below; and
2) be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

B) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. If there are indications of liquids dripping from the pump seal, a leak is detected.

C) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

D) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (A) above, provided the following requirements are met:
1) Each dual mechanical seal system is:
aa) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or
bb) Equipment with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 CFR 60.482-10; or
cc) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.
2) The barrier fluid system is in heavy liquid service or is not in VOC service.
3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
4) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.
5) The following requirements are met:
aa) Each sensor as described in paragraph (3) above is checked daily or is equipped with an audible alarm;
bb) The permittee determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
6) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph D)5)(bb) above, a leak is detected. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

E) Any pump that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs A), C), and D) above if the pump:
1) Has no externally actuated shaft penetrating the pump housing,

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 40 CFR 60.485(c), and
3) Is tested for compliance with paragraph E)2) above initially upon designation, annually, and at other times requested by the Division.

F) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of 40 CFR 60.182-10, it is exempt from paragraphs A) through E) above.

G) Any pump that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs A) and D)4) through 6) above if:
1) The permittee demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph A) above; and
2) The permittee has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph C) above if a leak is detected.

H) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs A)2) and D)4) above, and the daily requirements of paragraph D)5) above, provided that each pump is visually inspected as often as practicable and at least monthly.

ii) Pursuant to 40 CFR 60.482-3 (*Standards: Compressors*), the permittee shall comply with the following requirements:

A) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR 60.482-1(c) and paragraphs H) and I) below.

B) Each compressor seal system as required in paragraph A) above shall be:
1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or
2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 CFR 60.482-10; or
3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

C) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

D) Each barrier fluid system as described in paragraph A) above shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

E) Each sensor as required in paragraph D) above shall be checked daily or shall be equipped with an audible alarm. The permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

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F) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under paragraph E) above, a leak is detected.
G) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
H) A compressor is exempt from the requirements of paragraphs A) and B) above, if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of 40 CFR 60.482-10, except as provided in paragraph below.
I) Any compressor that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs A) through H) above if the compressor:
    1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in 40 CFR 60.485(c); and
    2) Is tested for compliance with paragraph I)1) above initially upon designation, annually, and at other times requested by the Division.
J) Any existing reciprocating compressor in a process unit which becomes an affected facility under 40 CFR 60.14 and 40 CFR 60.15 is exempt from 40 CFR 60.482(a), (b), (c), (d), (e), and (h), provided the permittee demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of paragraphs A) through E) and H) above.

iii) Pursuant to 40 CFR 60.482-4 (*Standards: Pressure Relief Devices in Gas/Vapor Service*), the permittee shall comply with the following requirements:
A) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c).
B) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c).
C) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of paragraphs A) and B) above.
D) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs A) and B)

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

above, provided after each pressure release, a new rupture disk is installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9.

iv) Pursuant to 40 CFR 60.482-5 (Standards: Sampling Connection Systems), the permittee shall comply with the following requirements:
   A) Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Gases displaced during filling of the sample container are not required to be collected or captured.
   B) Each closed-purge, closed-loop, or closed-vent system as required in paragraph A above, shall comply with the following requirements:
      1) Return the purged process fluid directly to the process line; or
      2) Collect and recycle the purged process fluid to a process; or
      3) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR 60.482-10; or
      4) Collect, store, and transport the purged process fluid to any of the following systems or facilities:
         aa) A waste management unit as defined in 40 CFR 63.111, if the waste management unit is subject to, and operated in compliance with the provisions of 40 CFR part 63, subpart G, applicable to Group 1 wastewater streams;
         bb) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266; or
         cc) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261.
   C) In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs A) and B).

v) Pursuant to 40 CFR 60.482-6 (Standards: Open-Ended Valves or Lines), the permittee shall comply with the following requirements:
   A) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.
   B) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
   C) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph A) above, at all other times.
   D) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs A), B), and C) above.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E) Open-ended valves or lines containing materials which would auto catalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs A) through C) above, are exempt from the requirements of paragraphs A) through C) above.

vi) Pursuant to 40 CFR 60.482-7 (Standards: Valves in Gas/Vapor Service and in Light Liquid Service), the permittee shall comply with the following requirements:

A) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with paragraphs B) through E) below, except as provided in paragraphs F), G), and H) below, 40 CFR 60.483-1, 2, and 40 CFR60.482-1(c).

B) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

C) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

D) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

E) First attempts at repair include, but are not limited to, the following best practices where practicable:

1) Tightening of bonnet bolts;
2) Replacement of bonnet bolts;
3) Tightening of packing gland nuts;
4) Injection of lubricant into lubricated packing.

F) Any valve that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph A) above, if the valve:

1) Has no external actuating mechanism in contact with the process fluid,
2) Is operated with emissions less than 500 ppm above background as determined by the method specified in 40 CFR 60.485(c), and
3) Is tested for compliance with paragraph F)2) above, initially upon designation, annually, and at other times requested by the Division.

G) Any valve that is designated, as described in 40 CFR 60.486(F)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph(A) above, if:

1) The permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph A) above, and
2) The permittee of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

H) Any valve that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph(A) above, if:

1) The permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

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2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the permittee designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and
3) The permittee follows a written plan that requires monitoring of the valve at least once per calendar year.

vii) Pursuant to 40 CFR 60.482-8 (Standards: Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Connectors), the permittee shall comply with the following requirements:
A) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the permittee shall follow either one of the following procedures:
1) The permittee shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of paragraphs B) through D) below.
2) The permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak.
B) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
C) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Condition E.4.9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
D) First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e), as vi)E) above.

viii) Pursuant to 40 CFR 60.482-9 (Standards: Delay of Repair), the permittee shall comply with the following requirements:
A) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.
B) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.
C) Delay of repair for valves will be allowed if:
1) The permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 60.482-10.
D) Delay of repair for pumps will be allowed if:
1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
E) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

ix) Pursuant to 40 CFR 60.482-10 (Standards: Closed Vent Systems and Control Devices), the permittee shall comply with the following requirements:
   A) For closed vent systems and control devices used to comply with the provisions of 40 CFR 60, Subpart VV, the permittee shall comply with the provisions of this Condition.
   B) Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent.
   C) Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816°C.
   D) Flares used to comply with this subpart shall comply with the requirements of 40 CFR 60.18.
   E) For control devices used to comply with the provisions of 40 CFR 60, Subpart VV, the permittee shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.
   F) Except as provided in paragraphs I) through K) below, each closed vent system shall be inspected according to the procedures and schedule specified below:
      1) If the vapor collection system or closed vent system is constructed of hard-piping, the permittee shall comply with the requirements specified in paragraphs aa) and bb) below:
         aa) Conduct an initial inspection according to the procedures in 40 CFR 60.485(b); and
         bb) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
      2) If the vapor collection system or closed vent system is constructed of ductwork, the permittee shall:
         aa) Conduct an initial inspection according to the procedures in 40 CFR 60.485(b); and
         bb) Conduct annual inspections according to the procedures in 40 CFR 60.485(b).
   G) Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in paragraph H) below.
      1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
      2) Repair shall be completed no later than 15 calendar days after the leak is detected.
   H) Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

I) If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of paragraphs F)1)aa) and F)2) above.

J) Any parts of the closed vent system that are designated, as described in paragraph L)2) below, as unsafe to inspect are exempt from the inspection requirements of paragraphs F)1)aa) and F)2) above if they comply with the following requirements:
   1) The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs F)1)aa) or F)2) above; and
   2) The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

K) Any parts of the closed vent system that are designated, as described in paragraph L)2) below, as difficult to inspect are exempt from the inspection requirements of paragraphs F)1)aa) and F)2) above if they comply with the requirements specified below:
   1) The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and
   2) The Process unit within which the closed vent system is located becomes an affected facility through 40 CFR 60.14 and 60.15, or the permittee designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and
   3) The permittee has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.

L) The permittee shall record the information specified below:
   1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.
   2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.
   3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c).
   4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
   5) For each visual inspection conducted in accordance with paragraph F)1)bb) above during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

M) Closed vent systems and control devices used to comply with provisions of 40 CFR 60, Subpart VV shall be operated at all times when emissions may be vented to them.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

a. The permittee is considered to be in compliance with the VOC emission limitations for MODIFICATION 01 and 02 when related emission units are venting to the carbon adsorbers. If the emission units listed above are not venting to the carbon adsorbers, the permittee shall submit material balance calculations and/or AP-42 guidance to demonstrate that the MODIFICATION 01 and 02 VOC emissions are less than the respective specified emission limitations. The Division reserves the right to require testing to develop an appropriate emission factor in case material balance does not satisfactorily show compliance with the emission limit.

b. In accordance with paragraph a. above, monthly VOC emissions shall be calculated based on mass balance for the MODIFICATION 01 and 02 emission units and the results shall be used to calculate the annual emissions using the formulas shown below. The results shall be kept available at the plant.

Monthly Emissions (tons/month) = EPS production (tons/month) x EF_{EPS} / 2000 lb/ton*

*EF_{EPS} shall be equal to 2.22 lb VOC/ton product, as determined by material balance, unless otherwise revised as required by the Division

Annual Emissions (tons/yr) = 12 month rolling total of monthly emissions

c. A copy of the leak detection and repair (LDAR) program meeting the criteria listed at **2.c Emission Limitations** above shall be kept available at a readily accessible location for inspection.

d. Also see the **Testing Requirements 3., Recordkeeping Requirements 4., Reporting Requirements 5., and Specific Control Equipment Operating Conditions 7. below**.

3. Testing Requirements:

a. Emission factors for the MODIFICATION 01 and 02 shall be determined based on mass balance. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 52:020, Section 10 and 401 KAR 50:045.

b. For storage tanks TK-6410 and TK-6420 which are equipped with a closed vent system and control device, the permittee is exempt from 40 CFR 60.8 of the General Provisions and shall meet the following requirements: [40 CFR 60.113b(c)]

i) Submit for approval by the Division as an attachment to the notification required by 40 CFR 60.7(a)(1) or, if the facility is exempt from 40 CFR 60.7(a)(1), as an attachment to the notification required by 40 CFR 60.7(a)(2), an operating plan containing the information listed below.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

A) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.

B) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

ii) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Division in accordance with paragraph a.i) above, unless the plan was modified by the Division during the review process. In this case, the modified plan applies.

c. The permittee shall conduct performance tests on each carbon adsorber within 180 days of final issuance of permit V-06-046, using EPA Method 25A or Division approved alternatives, to determine the destruction efficiency for volatile organic compounds. The Division reserves the right to require additional testing pursuant to 401 KAR 59:005 Section 2(2) and 401 KAR 50:045.

i) Pursuant to Section VII 2(1) of the Policy Manual of the Division for Air Quality as incorporated by reference in 401 KAR 50:016, Section 1. (1), the permittee shall submit a compliance test protocol at least one month prior to the projected test date.

ii) Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

iii) The permittee shall record information that is necessary to document control device operating conditions during the test and explain why the conditions represent normal operation.

iv) The testing on each carbon adsorber shall demonstrate the VOC destruction efficiency of 95% in order to comply with **Operating Limitations 1.a. and 1.b.ii.**

d. The permittee shall comply with the test methods and calibration procedures of 40 CFR 60.485(a) through (e) for equipment leaks.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

a. Emissions from MODIFICATION 01 and 02 emission units shall always be vented to the carbon adsorbers. During any instance when related VOC emissions are not vented to carbon adsorbers, all the information necessary for emissions calculations from the affected emissions units shall be monitored on a monthly basis. The permittee shall also submit an alternative compliance plan for Division's approval.

b. For storage tanks, see **Specific Recordkeeping Requirements 5** below.

c. All the emissions under control of the closed vent system shall be drawn into the system by a fan. An alarm shall be activated on the system control panel causing the recovery system to shut down upon the failure of the fan. A log shall be kept of such occurrences.

d. To demonstrate compliance with 95% control efficiency for each carbon adsorber, the permittee shall:
   i) monitor the solvent laden air (SLA) temperature entering the carbon bed. According to the operating plan for the pentane recovery system submitted pursuant to 40 CFR 60.113b(c)(1)(i) and (ii), an alarm shall be activated when the SLA stream temperature exceeds 90^{o}F. A log shall be kept of such occurrences; and
   ii) monitor carbon bed desorption temperature. According to the operating plan for pentane recovery system submitted pursuant to 40 CFR 60.113b(c)(1)(i) and (ii), an alarm shall be activated if the bed temperature does not reach at least 200^{o}F in first 2000 seconds of the regeneration phase. A log shall be kept of such occurrences.

e. The permittee shall monitor the facility components on a monthly basis in accordance with the procedures of 40 CFR 60.485 to demonstrate compliance with **Operating Limitations 1.c.** The permittee shall comply as follows:

   i) The permittee shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows:
      A) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:
         1) Zero air (less than 10 ppm of hydrocarbon in air); and
         2) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

   ii) The permittee shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows:
      A) The requirements of paragraph i)A) above shall apply.
      B) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii) The permittee shall test each piece of equipment unless it is demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:
   A) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference -- see 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.
   B) Organic compounds that are considered by the Division to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.
   C) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Division disagrees with the judgment, paragraphs A) and B) above shall be used to resolve the disagreement.

iv) The permittee shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply:
   A) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 °C (1.2 in. H_2O at 68 °F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference -- see 40 CFR 60.17) shall be used to determine the vapor pressures.
   B) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H_2O at 68 °F) is equal to or greater than 20 percent by weight.
   C) The fluid is a liquid at operating conditions.

f. Compliance with the requirements under paragraphs **4.a**., **4.c.**, and **4.d.** shall also satisfy the requirements of 40 CFR 64 Compliance Assurance Monitoring - operating plan for pentane recovery system submitted pursuant to 40 CFR 60.113b(c)(1)(i) and (ii).

g. Also see **Section F.2**.

5. <u>Specific Recordkeeping Requirements</u>:

a. For storage tanks TK-6410 and TK-6420, the permittee shall keep records and furnish reports as required below. The permittee shall keep copies of all reports and records required by this condition for at least 2 years. [40 CFR 60.115b]

i) After installing control equipment in accordance with 40 CFR 60.112b(a)(3) or (b)(1) (closed vent system and control device other than a flare), the permittee shall keep the following records. [40 CFR 60.115b(c)]
   A) A copy of the operating plan.
   B) A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2).

b. Pursuant to 40 CFR 60.486, the permittee shall comply with the following recordkeeping requirements:

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

i) When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply:
   A) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
   B) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months.
   C) The identification on equipment except on a valve, may be removed after it has been repaired.

ii) When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:
   A) The instrument and operator identification numbers and the equipment identification number.
   B) The date the leak was detected and the dates of each attempt to repair the leak.
   C) Repair methods applied in each attempt to repair the leak.
   D) "Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.
   E) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
   F) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
   G) The expected date of successful repair of the leak if a leak is not repaired within 15 days.
   H) Dates of process unit shutdowns that occur while the equipment is unrepaired.
   I) The date of successful repair of the leak.

iii) The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location:
   A) Detailed schematics, design specifications, and piping and instrumentation diagrams.
   B) The dates and descriptions of any changes in the design specifications.
   C) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
   D) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame.
   E) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iv) The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location:
   A) A list of identification numbers for equipment subject to the requirements of this subpart.
   B) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f).
   C) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 40 CFR 60.482-3(i), or 40 CFR 60.482-7(f) shall be signed by the permittee.
   D) A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 60.482-4.
   E) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f).
   F) The background level measured during each compliance test.
   G) The maximum instrument reading measured at the equipment during each compliance test.
   H) A list of identification numbers for equipment in vacuum service.

v) The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location:
   A) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.
   B) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

vi) The following information shall be recorded for valves complying with 40 CFR 60.483-2:
   A) A schedule of monitoring.
   B) The percent of valves found leaking during each monitoring period.

vii) The following information shall be recorded in a log that is kept in a readily accessible location:
   A) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and
   B) Any changes to this criterion and the reasons for the changes.

viii) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d):
   A) An analysis demonstrating the design capacity of the affected facility,
   B) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

C) An analysis demonstrating that equipment is not in VOC service.

ix) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

c. The permittee shall keep records of carbon adsorber monitoring parameters as specified in **Specific Monitoring Requirements 4.c and 4.d**.

d. The permittee shall keep records of monthly throughput of the polystyrene beads and pentane.

e. The permittee shall keep records of all periods when the emission units associated with MODIFICATION 01 and 02 are not vented to the carbon adsorbers. If the emission units are not venting to the carbon adsorbers, the permittee shall calculate and keep records of emission calculations based on material balance.

f. Also see **Section F.2**.

6. Specific Reporting Requirements:

a. See **5.a.i Specific Record keeping Requirements** for storage tanks. Also, see **Section F.9**

b. Pursuant to 40 CFR 60.487, the permittee shall comply with the following requirements:

i) The permittee shall submit semiannual reports to the Division.

ii) All semiannual reports to the Division shall include the following information, summarized from the information in Specific Recordkeeping Requirements 5.a:

A) Process unit identification.

B) For each month during the semiannual reporting period,

1) Number of valves for which leaks were detected as described in 40 CFR 60.482(7)(b) or 60.483-2,

2) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1),

3) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i),

4) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii),

5) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f),

6) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and

7) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

C) Dates of process unit shutdowns which occurred within the semiannual reporting period.

E) Revisions to items reported in the initial semiannual report if changes have occurred since the initial report or subsequent revisions to the initial report.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii) The permittee electing to comply with the provisions of 40 CFR 60.483-1 or 60.483-2 shall notify the Division of the alternative standard selected 90 days before implementing either of the provisions.

iv) The permittee shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions.

c. The permittee shall notify the Division of Air Quality about the periods when any of the carbon adsorber malfunctioned.

d. Also see **Section F.9**.

7. Specific Control Equipment Operating Conditions:

a. Each carbon adsorber shall be maintained and replaced or regenerated according to the manufacturer's guidelines. Any problems associated with the operation or regeneration of the carbon bed shall be recorded in a log.

b. The hydrochloric acid shall always be added to the three (3) Batchout Tanks (EP 10; item nos. 3 and 4) via submerged fill pipe.

8. Alternate Operating Scenarios:

None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Two (2) Boilers, Plant 2 (Impregnated Polystyrene Beads Production)

Emission Point: 12A
Description: One (1) Boiler (BLR-8840)
Maximum Capacity: 12.553 million British thermal units per hour (mmBtu/hr)
Construction Date: 01/30/87
Primary Fuel: Natural Gas
Secondary Fuel: No. 2 fuel oil

Emission Point: 12B
Description: One (1) 800 hp Boiler (BLR-8860)
Maximum Capacity: 33.50 mmBtu/hr
Construction Date: to be installed in 2007
Primary Fuel: Natural Gas
Secondary Fuel: No. 2 fuel oil

Two (2) Boilers, Plant 3 (Polystyrene Beads Production)

Emission Point: 13A
Description: One (1) Boiler (BLR-8820)
Maximum Capacity: 29.291 mmBtu/hr
Construction Date: 04/03/89
Primary Fuel: Natural Gas
Secondary Fuel: No. 2 fuel oil

Emission Point: 13B
Description: One (1) Boiler (BLR-8830)
Maximum Capacity: 29.291 mmBtu/hr
Construction Date: 04/03/89
Primary Fuel: Natural Gas
Secondary Fuel: No. 2 fuel oil

Emission Point 14
Description: One (1) Boiler (BLR-8810)
Maximum Capacity: 25.106 mmBtu/hr
Construction Date: 05/30/90
Primary Fuel: Natural Gas
Secondary Fuel: No. 2 fuel oil

APPLICABLE REGULATIONS:
401 KAR 59:015, *New Indirect Heat Exchangers* - applies to the particulate matter and sulfur dioxide emissions for each indirect heat exchanger commenced on or after April 9, 1972 with a heat input capacity at or below 250 mmBtu/hour, and more than one (1) mmBtu/hour.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

401 KAR 60:005, Sections 2 and 3(1)(e) - incorporates by reference *40 CFR Part 60.40c to 60.48c (Subpart Dc), "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units"*. This rule applies to boilers identified as BLR-8860 (EP 12B) and BLR-8810 (EP 14), both of which commenced after June 9, 1989 having a heat input rating of 29 MW (100 mmBtu/hr) or less, and greater than 2.9 MW (10 mmBtu/hr). Pursuant to 40 CFR 60.46c(e), the monitoring requirements of 40 CFR 60.46c(a) and (d) are not applicable to these units which are subject to 40 CFR 60.42c(h)(1) since compliance with the SO_2 standard shall be demonstrated based on fuel supplier certifications as described.

NON-APPLICABLE REGULATIONS:

This source has elected to accept annual limits in order to preclude the applicability of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality* (PSD) for VOC emissions increases from the following source modification as described below:

MODIFICATION 02: MODIFICATION 02 is a VOC emissions increase affecting EP 10, emission units 7, 8, 9 and 10 (listed in the prior Section B), and EP 12B (Boiler BLR-8860), as approved by the Division upon issuance of this Permit Number V-06-046. VOC emissions from EP 10 emission units 7, 8, 9 and 10 shall be controlled by the Carbon Adsorber (01 or 02) with a minimum control efficiency of 95%. The requirements pertaining to this modification are contained in the preceding Section B for EP 10. Further, the permittee has requested a voluntary fuel oil sulfur limit of 0.15% (weight) for EP 12B. This limit will comply with the 0.5% fuel sulfur limit of 40 CFR 60 Subpart Dc, and restrict the SO_2 emissions from the new boiler to less than the 40 ton per year applicability threshold of 401 KAR 51:017.

1. **Operating Limitations:**

   To preclude the applicability of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality*, the sulfur content of No. 2 fuel oil input to EP 12B (Boiler BLR-8860) shall not exceed 0.15% by weight.

   Compliance Demonstration Method:

   Refer to **Compliance Demonstration Method 2.d** under **Emission Limitations**, below**.**

2. **Emission Limitations:**

   a. Pursuant to 401 KAR 59:015, Section 4(1)(c), emissions of particulate matter (PM) from each of boilers EP12A, EP13A, EP13B and EP14 shall not exceed 0.343 lb/mmBtu actual heat input.

   b. Pursuant to 401 KAR 59:015, Section 4(1)(c), emissions of particulate matter (PM) from boiler EP12B shall not exceed 0.325 lb/mmBtu actual heat input.

   c. Pursuant to 401 KAR 59:015, Section 4(2), emissions from each boiler shall not exceed 20% opacity based on a six minute average, except that a maximum of 40% opacity based on a six minute average shall be permissible for not more than six consecutive minutes in any 60 consecutive minutes during cleaning the fire-box or blowing soot and except for emissions during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

d. Pursuant to 401 KAR 59:015, Section 5(1)(c), emissions of sulfur dioxide (SO_2) from each of boilers EP 12A, EP13A, EP13 B and EP14 shall not exceed 1.28 lb/mmBtu actual heat input.

e. Pursuant to 401 KAR 59:015, Section 5(1)(c), emissions of sulfur dioxide (SO_2) from boiler EP12B shall not exceed 1.16 lb/mmBtu actual heat input.

f. When combusting No. 2 fuel oil, the permittee shall not cause to be discharged into the atmosphere from boilers identified as BLR-8860 (EP 12B) and BLR-8810 (EP 14) any gases that contain SO_2 emissions in excess of five tenths (0.5) pounds per million Btu heat input; or, as an alternative, the sulfur content of the combusted fuel oil shall not exceed five-tenths percent (0.5%) by weight. The SO_2 and fuel oil sulfur content limit apply at all times, including periods of startup, shutdown, and malfunction. [40 CFR 60.42c(d) and 60.42c(i)]

Compliance Demonstration Method:

a. Compliance with the particulate emission limit is demonstrated when burning natural gas, based on an AP-42 emission factor of 7.6 lbs PM/million standard cubic feet (mmscf) and a fuel heat capacity of 1020 mmBtu/mmscf. Compliance with the particulate emission limit is demonstrated when burning fuel oil, based on an AP-42 emission factor of 2 lbs PM/1000 gallons fuel and a fuel heat capacity of 140,000 Btu per gallon.

b. Compliance with the opacity limit is demonstrated when burning natural gas. Refer to **Specific Monitoring Requirements 4.b** for compliance with the opacity limitation when burning No. 2 fuel oil.

c. Compliance with the sulfur dioxide limit is demonstrated when burning natural gas, based on an AP-42 emission factor of 0.6 lbs SO_2/mmscf and a fuel heat capacity of 1020 mmBtu/mmscf. Compliance with the sulfur dioxide limit is demonstrated when burning fuel oil if the lbs of SO_2 per mmBtu is less than the limit, to be determined by the permittee based on an AP-42 emission factor of 142 x %S (lb SO_2/kgal fuel), the fuel oil sulfur content S (% by weight), and a fuel heat capacity of 140,000 Btu per gallon. Refer to **Specific Monitoring Requirements 4.a** and **Specific Recordkeeping Requirements 5.c** for determination of fuel oil sulfur content.

d. Compliance with the emission limits or fuel oil sulfur limits under **Operating Limitations 1. and Emission Limitations 2.f** may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.28c(f)(1). [40 CFR 60.42c(h)]. See **Specific Recordkeeping Requirements 5.c.**

3. Testing Requirements:

a. The performance test shall consist of the certification from the fuel supplier, as described under 40 CFR 60.48c(f)(2). [40 CFR 60.44c(h)]. See **Specific Recordkeeping Requirements 5.c.**

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. Pursuant to 401 KAR 59:005 Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

a. The permittee shall monitor and maintain records of the monthly natural gas usage rate (cubic feet) and the monthly hours of operation of each boiler.

b. If No. 2 fuel oil is burned, the permittee shall perform a qualitative visible observation of the opacity of emissions once per week from the stack upon stabilization of the emission unit after startup and maintain a log of the observation. If visible emissions from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs.

5. Specific Recordkeeping Requirements:

a. Records shall be maintained of the visual observations of stack emissions, any EPA Reference Method 9 test performed, and any necessary repairs made as a result of not meeting an emission limitation.

b. The permittee shall maintain records of monthly fuel usage and hours of boiler operation.

c. The permittee shall maintain records of the fuel supplier certification for all fuel oil burned. Certification shall include the following information for distillate oil: [40 CFR 60.48c(f)(1)]
   i) The name of the oil supplier; and
   ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c.

d. For boilers identified as BLR-8860 (EP 12B) and BLR-8810 (EP 14), the permittee shall record and maintain records of the amounts of each fuel combusted during each day. [40 CFR 60.48c(g)]

e. Records shall be maintained of and any necessary repairs, maintenance, inspection, calibration and/or replacement of combustion equipment.

f. All records shall be maintained in accordance with **Section F.2**.

6. Specific Reporting Requirements:

a. The permittee subject to the sulfur dioxide emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records and submit reports as required by 40 CFR 60.48c(d), including the following information, as applicable. [40 CFR 60.48c(d) and (e)]
   i) Calendar dates covered in the reporting period.
   ii) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), or (3), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the permittee of the affected facility that

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

iii) The reporting period is each six-month period. All reports shall be submitted to the Division and shall be postmarked by the 30th day following the end of the reporting period.

b. See **Section F.5.**

7. Specific Control Equipment Operating Conditions:
None

8. Alternate Operating Scenarios:
None

9. Compliance Schedule:
40 CFR 63 Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters was vacated and remanded by U.S. Court of Appeals on July 30, 2007. The facility will be required to perform a case-by-case MACT analysis, if notified to do so.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Point: 15

Description: Styrene Bulk Truck Loading Rack
Control Device: Vapor balancing system with control efficiency of 99.9%
Maximum Capacity: 3,000,000 gallons per year
Construction Date: 1989

Activities with less than 0.5 tpy of combined HAPs and less than 5 tpy of non-hazardous regulated air pollutant:

1. 6000 gal. Ethylbenzene (EB) Tank (TK-0620)
2. 5500 gal Ethylbenzene Line 2 Recycle Tank (TK-0610)
3. 10,000 gal Ethylbenzene Line 2 & 3 Recycle Tank (TK-0670)
4. 10,250 gal. EB/Styrene Tank (TK-0910)
5. 20,000 gal Lines 1 & 3 Ethylbenzene Recycle Tank (TK-0680)
6. Styrene and EB Unloading Stations

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2, requires affected sources to comply with the applicable Part 63 NESHAP, *40 CFR Part 63.2330 (Subpart EEEE), "National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-gasoline)"*. EP15 is designated as an "existing" affected source pursuant to 40 CFR 63.2338(f). The transfer of organic liquids into transport vehicles at EP15 is less than 11.8 million liters (3,117,560 gallons) per year, therefore EP15 is a *low throughput transfer rack,* as per 40 CFR 63.2406. Storage tanks (TK-0620, TK-0610, TK-0670, TK-0910, and TK-0680) storing Styrene or Ethylbenzene, with storage capacity ranging from 5500 to 20,000, are not subject to any controls except the record keeping requirements pursuant to 40 CFR 63.2343(b) since the vapor pressure of each material is less than the rule applicability threshold of 27.6 kPa. The operation of Styrene and EB Unloading Stations is not subject to any controls since it only unloads organic liquids and no organic liquids are loaded at any of the transfer tracks. Therefore, the operation identified as Styrene and EB Unloading Stations is not subject the rule requirements except the record keeping requirements pursuant to 40 CFR 63.2343(a).

1. Operating Limitations:

a. The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3 (a), apply to the affected facilities listed in this section, except when otherwise specified in 40 CFR 63, Subpart EEEE. Table 12 to Subpart EEEE of Part 63 specifies the provisions of Subpart A that apply and those that do not apply. [40 CFR 63.2398]

b. Pursuant to 40 CFR 63.2342(b)(1), for this existing affected source, the permittee must comply with the emission limitations, operating limits, and work practice standards for existing affected sources no later than February 5, 2007, except as provided in 40 CFR 63.2342(b)(2) and (3).

c. Pursuant to 40 CFR 63.2346(b), the permittee shall be subject to the following work practice standards:

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

i) Design and operate the vapor balancing system to route organic HAP vapors displaced from the loading of organic liquids into transport vehicles to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common loader. [40 CFR 63.2346(b)(3)(i)]

ii) Design and operate the vapor balancing system to route organic HAP vapors displaced from loading of organic liquids into containers directly (e.g., no intervening tank or containment area such as a room) to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header. [40 CFR 63.2346(b)(3)(ii)]

Compliance Demonstration Method:
See **Specific Monitoring Requirements 4. and Specific Recordkeeping Requirements 5.** below for compliance demonstration methods.

2. Emission Limitations:
None

3. Testing Requirements:
None

4. Specific Monitoring Requirements:

a. Pursuant to 40 CFR 63.2366 for nonflare control devices controlling storage tanks and low throughput transfer racks, the permittee must submit a monitoring plan according the requirements in 40 CFR Subpart SS for monitoring plans. The plan shall be submitted before operating the vapor balance system.

b. Pursuant to 40 CFR 63.2374, the permittee must monitor and collect data according to 40 CFR 63 Subpart SS and 40 CFR 63.2374(b) and (c).

c. Pursuant to 40 CFR 63.2378(a), the permittee shall monitor each potential source of vapor leakage in the system quarterly during the loading of a transport vehicle or the filling of a container using the methods and procedures described in the rule requirements selected for the work practice standard for equipment leak components as specified in 40 CFR 63, Subpart EEEE, Table 4, item 4. An instrument reading of 500 ppmv defines a leak. Repair of leaks is performed according to the repair requirements specified in the permittee's selected equipment leak standard.

d. Pursuant to 40 CFR 63.2378(b), the permittee shall follow the requirements in 40 CFR 63.6(e)(1) and (3) during periods of startup, shutdown, malfunction, or nonoperation, of the affected source or any part thereof. In addition, the permittee shall comply with 40 CFR 63.2378(b)(1) through (b)(3), as applicable.

5. Specific Recordkeeping Requirements:

a. Pursuant to 40 CFR 63.2390(b)(1), the permittee shall comply with recordkeeping requirements that are applicable as specified in 40 CFR 63, Subpart EEEE, Table 12.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. Pursuant to 40 CFR 63.2390(b)(2), the permittee shall keep records of inspection as specified in **Specific Monitoring Requirements 4.c.** above.

c. For each transport vehicle into which organic liquids are loaded at a transfer rack that is subject to 40 CFR 63, Subpart EEEE, the permittee shall keep the applicable records in 40 CFR 63.2390(c)(1) and (c)(2) or alternatively the verification records in 40 CFR 63.2390(c)(3).
   i) For transport vehicles equipped with vapor collection equipment, the documentation described in 40 CFR 60.505(b), except that the test title is: Transport Vehicle Pressure Test-EPA Reference Methods 27. [40 CFR 63.2390(c)(1)]
   ii) For transport vehicles without vapor collection equipment, current certification in accordance with the U.S. DOT pressure test requirements in 49 CFR part 180 for cargo tanks or 49 CFR 173.31 for tank cars. [40 CFR 63.2390(c)(2)]
   iii) In lieu of keeping the records specified in paragraph (i) or (ii) above, as applicable, the owner or operator shall record that the verification of U.S. DOT tank certification or Method 27 of appendix A to 40 CFR 60 testing, required in 40 CFR 63, Subpart EEEE Table 5, item 2, has been performed. Various methods for the record of verification can be used, such as: a check-off on a log sheet, a list of U.S. DOT serial numbers or Method 27 data, or a position description for the gate security showing that the security guard will not allow any trucks on site that do not have the appropriate documentation. [40 CFR 63.2390(c)(3)]

d. Pursuant to 40 CFR 63.2390(d), the permittee shall keep records of the total actual annual facility-level organic liquid loading volume as defined in 40 CFR 63.2406 through transfer racks to document the applicability, or lack thereof, of emissions limitation and/or work practice standards in 40 CFR 63, Subpart EEEE, Table 2, items 7 through 10.

e. Pursuant to 40 CFR 63.2394:
   i) The records shall be in a form suitable and readily available for expeditious inspection and review according to 40 CFR 63.10(b)(1), including records stored in electronic form at a separate location.
   ii) As specified in 40 CFR 63.10(b)(1), the permittee shall keep files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, corrective action, report, or record.
   iii) The permittee shall keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee may keep the records off site for the remaining 3 years.

6. Specific Reporting Requirements:

a. Pursuant to 40 CFR 63.2382(a), the permittee shall submit each notification that is applicable as specified in 40 CFR 63, Subpart EEEE, Table 12.

b. Pursuant to 40 CFR 63.2382(b)(1), the permittee shall submit the initial notification no later than 120 calendar days after February 3, 2004.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. Pursuant to 40 CFR 63.2386(b), the permittee shall submit each report according to 40 CFR 63, Subpart EEEE, Table 11, by the dates shown in 40 CFR 63.2386(b)(1) through (3), and by the dates shown in 40 CFR 63, Subpart EEEE, Table 12, whichever are applicable.
   i) The first Compliance report must cover the period beginning on the compliance date that is specified for the affected source in 40 CFR 63.2342 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for the affected source in 40 CFR 63.2342. [40 CFR 63.2386(b)(1)(i)]
   ii) The first Compliance report must be postmarked no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for the affected source in 40 CFR 63.2342. [40 CFR 63.2386(b)(1)(ii)]
   iii) Each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. [40 CFR 63.2386(b)(2)(i)]
   iv) Each subsequent Compliance report must be postmarked no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. [40 CFR 63.2386(b)(2)(ii)]
   v) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, if the Division has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) and (2) of this section.

d. The first Compliance report must contain the information specified in 40 CFR 63.2386(c)(1) through (10), as applicable.

e. Subsequent Compliance reports must contain the information in 40 CFR 63.2386(c)(1) through (9), as applicable, and the information in 40 CFR 63.2386(d)(1) through (4), as applicable.

f. The permittee that has obtained a Title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in 40 CFR 63, Subpart EEEE, in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A). If the permittee submits a Compliance report pursuant to 40 CFR 63, Subpart EEEE, Table 11 along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission limitation in 40 CFR 63, Subpart EEEE, the submission of the Compliance report will be considered as satisfying any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report will not otherwise affect any obligation the permittee may have to report deviations from permit requirements to the Division.

7. Specific Control Equipment Operating Conditions:
None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

8. Alternate Operating Scenarios:
None

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

Description	Generally Applicable Regulation
1. 17,000 gal Mineral Oil Storage Tank (TK-0510)	None
2. 12,000 gal Polybutene Tank (TK-0810)	None
3. 2-300 gal Line 3 Catalyst Tanks (D-0110, D-0120)	None
4. Mass Plant Pellet Storage Silos & Packaging	401 KAR 59:010
5. Maintenance Area Space Heaters	None
6. Safety Kleen Cold Solvent Degreaser Units	None (Exempt from 401 KAR 59:185)
7. Ethylbenzene Degreaser Unit (D-0610)	None (Exempt from 401 KAR 59:185)
8. Two (2) 500 gal Fuel Oil Tanks (TK-9820, TK-9830)	None
9. 500 gal Gasoline Tank (TK-0890)	None
10. Three (3) Mass Plant Direct Fired Heaters#1; 5 mmBtu/hr each (HTR-9410, HTR-9420, HTR-9430)	None
11. Two (2) Suspension Plant Effluent Tanks (D-4720, D-4820)	None
12. Suspension Plant Vacuum System	None
13. Suspension Plant Batchout Tanks (D-4710, D-4810)	None
14. Centrifuges, Dryers, Screeners and Bins	401 KAR 59:010
15. Bead Truck & Rail Loading Station	401 KAR 59:010
16. Caustic Solution Storage Tanks (TK-6110, TK-6210, TK-6230	None
17. HCl Storage Tank (Deionized Water)	401 KAR 63:020
18. Suspension Plant Bead Storage Silos	401 KAR 59:010
19. Impregnation Plant Premix Tank (D-7010)	None
20. Impregnation Pack Area #1 including Blender	401 KAR 59:010
21. Impregnation Pack Area #2 including Blender	401 KAR 59:010
22. Impregnation Plant Cyclones	401 KAR 59:010
23. Impregnation Plant Storage Silos	401 KAR 59:010
24. Impregnation Plant Caustic Storage Tank (D-6220)	None
25. Extruder – Pelletizers (3)	401 KAR 59:010
26. Impregnation Plant Lab/Test Facilities	None
27. Waste Water Treatment Facility	None
28. Two (2) 287 hP Fire Water Pumps	None
29. 200 gal Impregnation Plant HCl Day tanks (D-6120)	401 KAR 63:020
30. Two (2) 300-gal Line 1 Initiator Tanks (D-0130, D-0140)	None
31. Silicone Storage Bulk Container	None
32. 12,000 gal Fuel Oil Tank (TK-9810)	None
33. 15,000 gal Fuel Oil Tank (TK-9850)	None
34. 2,000 gal Fuel Oil Tank (TK-9860)	None
35. 12,500 gal HCl Bulk Storage Tank (TK-6110)	401 KAR 63:020
36. 200 gal Suspension Plant HCl Day Tank (D-6140)	401 KAR 63:020
37. Oligomer Collection Drums (D-1810, D-3829)	None

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

38. Impregnation Plant – 2 Dryers, 2 Secondary dryers, 1 Screener, 2 Packaging Areas, and Transfer Equipment (constructed in 2007)	401 KAR 59:010

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Volatile organic compound, particulate and hazardous air pollutant (HAP) emissions, including styrene and ethylbenzene emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

3. **Source Recordkeeping Requirements:**
   The following recordkeeping requirements apply to Plant 1 (EP M06, M06A, M07, M08, and M11), Plant 3 (EP S06, S07, and S08), and storage tanks (EP M02, M03, M04, and M05), pursuant to the requirements of 40 CFR 63, Subpart JJJ.

   a. Pursuant to 40 CFR 63.1335(a), unless otherwise specified in 40 CFR 63, Subpart JJJ, the permittee of an affected source shall keep copies of all applicable records and reports required by 40 CFR 63, Subpart JJJ for at least 5 years, as specified in 40 CFR 63.1335(a)(1), with the exception listed in 40 CFR 63.1335(a)(2).
      1) All applicable records shall be maintained in such a manner that they can be readily accessed. The most recent 6 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provides access within 2 hours after a request. The remaining 4 and one-half years of records may be retained offsite. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche. [40 CFR 63.1335(a)(1)]
      2) If the permittee submits copies of reports to the appropriate EPA Regional Office, the permittee is not required to maintain copies of reports. If the EPA Regional Office has waived the requirement of 40 CFR 63.10(a)(4)(ii) for submittal of copies of reports, the permittee is not required to maintain copies of those reports. [40 CFR 63.1335(a)(2)]

   b. The permittee of an affected source shall comply with the applicable recordkeeping and reporting requirements in 40 CFR 63, subpart A as specified in Table 1 of 40 CFR 63, Subpart JJJ. These requirements include, but are not limited to, the requirements specified in 40 CFR 63.1335(b)(1) and (b)(2).
      1) Pursuant to 40 CFR 63.1335(b)(1), the permittee shall develop and implement a written startup, shutdown, and malfunction plan as specified in 40 CFR 63.6(e)(3) of 40 CFR 63, subpart A. The records of the startup, shutdown, and malfunction plan shall be kept as specified in 40 CFR 63.1335(b)(1)(i)(A) through (b)(1)(i)(C).
      2) Pursuant to 40 CFR 63.1335(b)(2), for new affected sources, each permittee shall comply with the provisions in 40 CFR 63.5 regarding construction and reconstruction, excluding the provisions specified in 40 CFR 63.5(d)(1)(ii)(H), (d)(1)(iii), (d)(2), and (d)(3)(ii).

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

c. The permittee shall comply with the applicable recordkeeping and documentation requirements as specified in 40 CFR 63.1335(d).

4. **Source Reporting Requirements:**
The following reporting requirements shall apply to Plant 1 (EP M06, M06A, M07, M08, and M11), Plant 3 (EP S06, S07, and S08), and storage tanks (EP M02, M03, M04, and M05), pursuant to the requirements of 40 CFR 63, Subpart JJJ.

a. Pursuant to 40 CFR 63.1335(b)(ii), reports of startup, shutdown, and malfunction. For the purposes of 40 CFR 63, Subpart JJJ, the semiannual startup, shutdown, and malfunction reports shall be submitted on the same schedule as the Periodic Reports required under 40 CFR 63.1335(e)(6) instead of being submitted on the schedule specified in 40 CFR 63.10(d)(5)(i). The reports shall include the information specified in 40 CFR 63.10(d)(5)(i), and 40 CFR 63.1335(b)(1)(i)(A) through (b)(1)(i)(C).

b. Pursuant to 40 CFR 63.1335(b)(2), for new affected sources, each permittee shall comply with the provisions in 40 CFR 63.5 regarding construction and reconstruction, excluding the provisions specified in 40 CFR 63.5(d)(1)(ii)(H), (d)(1)(iii), (d)(2), and (d)(3)(ii).

c. Pursuant to 40 CFR 63.1335(e)(3), the permittee requesting an extension for compliance; requesting approval to use alternative monitoring parameters, alternative continuous monitoring and recordkeeping, or alternative controls; requesting approval to use engineering assessment to estimate emissions from a batch emissions episode, as described in 40 CFR 63.1323(b)(6)(i)(C); wishing to establish parameter monitoring levels according to the procedures contained in 40 CFR 63.1334(c) or (d); or requesting approval to incorporate a provision for ceasing to collect monitoring data, during a start-up, shutdown, or malfunction, into the start-up, shutdown, and malfunction plan, when that monitoring equipment would be damaged if it did not cease to collect monitoring data, as permitted under40 CFR 63.1310(j)(3), shall submit a Precompliance Report according to the schedule described in paragraph 40 CFR 63.1335(e)(3)(i). The Precompliance Report shall contain the information specified in paragraphs 40 CFR 63.1335(e)(3)(ii) through (e)(3)(viii), as appropriate.

d. Pursuant to 40 CFR 63.1335(e)(5), for existing and new affected source, a Notification of Compliance Status shall be submitted. For equipment leaks subject to 40 CFR 63.1331, the permittee shall submit the information required in 40 CFR 63.182(c) in the Notification of Compliance Status within 150 days after the first applicable compliance date for equipment leaks in the affected source, and an update shall be provided in the first Periodic Report that is due at least 150 days after each subsequent applicable compliance date for equipment leaks in the affected source. For all other emission points, including heat exchange systems, the Notification of Compliance Status shall contain the information listed in 40 CFR 63.1335(e)(5)(i) through (e)(5)(xi), as applicable, and shall be submitted no later than 150 days after the compliance dates specified in 40 CFR 63, Subpart JJJ.

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

e. Pursuant to 40 CFR 63.1335(e)(6), for existing and new affected sources, the permittee shall submit Periodic Reports as specified in 40 CFR 63.1335(e)(6)(i) through (e)(6)(xi). In addition, for equipment leaks subject to 40 CFR 63.1331, the permittee shall submit the information specified in 40 CFR 63.182(d) under the conditions listed in 40 CFR 63.182(d), and for heat exchange systems subject to 40 CFR 63.1328, the permittee shall submit the information specified in 40 CFR 63.104(f)(2) as part of the Periodic Report required by 40 CFR 63.1335(e)(6). 40 CFR 63.1334 shall govern the use of monitoring data to determine compliance for Group 1 emissions points and for Group 1 and Group 2 emission points included in emissions averages with the following exception: As discussed in 40 CFR 63.1314(a)(9), for storage vessels to which the provisions of 40 CFR 63.1334 do not apply, as specified in the monitoring plan required by 40 CFR 63.120(d)(2), the permittee is required to comply with the requirements set out in the monitoring plan, and monitoring records may be used to determine compliance.

f. Pursuant to 40 CFR 63.1335(e)(6)(i), except as specified in 40 CFR 63.1335(e)(6)(xi) and (e)(6)(xii), a report containing the information in 40 CFR 63.1355(e)(6)(ii) or containing the information in 40 CFR 63.1334(e)(6)(iii) through (e)(6)(x), as appropriate, shall be submitted semiannually no later than 60 days after the end of each 6-month period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due.

g. Pursuant to 40 CFR 63.1335(e)(7)(iv), the permittee of emissions points (other than equipment leak components subject to 40 CFR 63.1331) that are subject to 40 CFR 63.1310(i)(1) or (i)(2) shall submit a report as specified in 40 CFR 63.1335(e)(7)(iv)(A) and (B).

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place as defined in this permit, and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.

8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
   a. Identification of the term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period.
   e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality
Owensboro Regional Office
3032 Alvey Park Drive W., Suite 700
Owensboro, KY 42303-2191

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

SECTION G - GENERAL PROVISIONS (CONTINUED)

1. General Compliance Requirements

   a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

   b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
      (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
      (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
      (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
      (4) New requirements become applicable to a source subject to the Acid Rain Program.

      Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

   d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020 Section 3(1)(c)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-15-b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].

l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].

o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of a permit shall be considered compliance with:
(1) Applicable requirements that are included and specifically identified in the permit and
(2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].

b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

3. Permit Revisions

a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission points M06A, S08, 12B, and modification of emissions points 10 and 11, as MODIFICATION 02 in Section B of the permit, in accordance with the terms and conditions of this permit.

a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.

b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
   (1) The date when construction commenced.
   (2) The date of start-up of the affected facilities listed in this permit.
   (3) The date when the maximum production rate specified in the permit application was achieved.

c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.

d. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.

e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.

f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

SECTION G - GENERAL PROVISIONS (CONTINUED)

5. Testing Requirements

   a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

   b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

   c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

   a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

   b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NOx compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

7. Emergency Provisions

   a. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
   (1) An emergency occurred and the permittee can identify the cause of the emergency;

SECTION G - GENERAL PROVISIONS (CONTINUED)

(2) The permitted facility was at the time being properly operated;
(3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
(4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
(5) This requirement does not relieve the source of other local, state or federal notification requirements.

b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].

c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

8. Ozone Depleting Substances

a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
(1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
(2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
(3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
(4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
(5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
(6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION G - GENERAL PROVISIONS (CONTINUED)

9. Risk Management Provisions

   a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

      RMP Reporting Center
      P.O. Box 1515
      Lanham-Seabrook, MD 20703-1515.

   b. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None